

(ANNEXURE TO ACT XXVI OF 1939.)

THE INDIAN AIRCRAFT ACT, 1934.

ACT No. XXII OF 1934.

19th August 1934.

An Act to make better provision for the control of the manufacture, possession, use, operation, sale, import and export of aircraft.

Whereas it is expedient to make better provision for the control of the manufacture, possession, use, operation, sale, import and export of aircraft; It is hereby enacted as follows:—

1. (1) This Act may be called THE INDIAN AIRCRAFT ACT, 1934.

Short title
and extent.

(2) It extends to the whole of British India, including British Baluchistan and the Sonthel Parganas,
* and applies also.—

(a) to British subjects and servants of the Crown in any part of India;

(b) to British subjects who are domiciled in any part of India wherever they may be;

(c) to, and to persons on, aircraft registered in British India wherever they may be." *

[*—*] Added by Act XXXVII of 1939, S.2.

- (d) the registration and marking of aircraft ;
- (e) the conditions under which aircraft may be flown, or may carry passengers, mails or goods ; or may be used for industrial purposes and the certificates, licenses or documents to be carried by aircraft ;
- (f) the inspection of aircraft for the purpose of enforcing the provisions of this Act and the rules thereunder, and the facilities to be provided for such inspection ;
- (g) the licensing of persons employed in the operation, manufacture, repair or maintenance of aircraft ;
- (h) the air-routes by which and the conditions under which aircraft may enter or leave British India or may fly over British India, and the places at which aircraft shall land ;
- (i) the prohibition of flight by aircraft over any specified area, either absolutely or at specified times or subject to specified conditions and exceptions ;
- (j) the supply, supervision and control of air-route beacons, aerodrome lights, and lights at or in the neighbourhood of aerodromes or on or in the neighbourhood of air-routes ;
- *(jj) the installation and maintenance of lights on private property in the neighbourhood of aerodromes or on or in the neighbourhood of air-routes, by the owners or occupiers of such property, the payment by the Central Government for such installation and maintenance, and the supervision and control of such installation and maintenance, including the right of access to the property for such purposes ;*
- (k) the signals to be used for purposes of communication by or to aircraft and the apparatus to be employed in signalling ;
- (l) the prohibition and regulation of the carriage in aircraft of any specified article or substance ;
- (m) the measures to be taken and the equipment to be carried for the purpose of ensuring the safety of life ;
- (n) the issue and maintenance of log books ;
- (o) the manner and conditions of the issue or renewal of any license or certificate under the Act or the rules, the examinations and tests to be undergone in connection therewith, the form, custody, production, endorsement, cancellation, suspension or surrender of such licence or certificate, or of any log books ;

[*—*] Added by Act XXXVII of 1939, S.4.

(p) the fees to be charged in connection with any inspection, examination, test, certificate or licence, made, issued or renewed under this Act;

(q) the recognition for the purposes of this Act of licences and certificates issued elsewhere than in British India relating to aircraft or to the qualifications of persons employed in the operation, manufacture, repair or maintenance of air craft; and

(r) any matter subsidiary or incidental to the matters referred to in this sub-section.

Power of
Central
Government
to make rules
for investiga-
tion of
accidents.

6. (1) If the Central Government is of opinion that in the interests of the public safety or tranquillity the issue of all or any of the following orders is expedient, it may, by notification in the official Gazettee,—

(a) cancel or suspend, either absolutely or subject to such conditions as it may think fit to specify in the order, all or any licences or certificates issued under this Act;

(b) prohibit, either absolutely or subject to such conditions as it may think fit to specify in the order, or regulate in such manner as may be contained in the order, the flight of all or any aircraft or class of aircraft over the whole or any portion of British India;

(c) prohibit, either absolutely or conditionally, or regulate the erection, maintenance or use of any aerodrome, craft factory, flying school or club, or place where aircraft are manufactured, repaired or kept, or any class or description thereof; and

(d) direct that any aircraft or class of aircraft or any aerodrome, aircraft factory, flying school or club, or place where aircraft are manufactured, repaired or kept, together with any machinery, plant, material or things used for the operation, manufacture, repair or maintenance of aircraft shall be delivered, either forthwith or within a specified time, to such authority and in such manner as it may specify in the order, to be at the disposal of His Majesty for the public service.

(2) Any person who suffers direct injury or loss by reason of any order made under clause (c) or clause (d) of sub-section (1) shall be paid such compensation as may be determined by such authority as the Central Government may appoint in this behalf.

(3) The Central Government may authorize such steps to be taken to secure compliance with any

order made under sub-section (1) as appear to it to be necessary.

(4) Whoever knowingly disobeys, or fails to comply with, or does any act in contravention of, an order made under sub-section (1) shall be punishable with imprisonment for a term which may extend to three years, or with fine, or with both, and the Court by which he is convicted may direct that the aircraft or thing (if any), in respect of which the offence has been committed, or any part of such thing, shall be forfeited to His Majesty.

7. (1) The Central Government may, by notification in the official Gazette, make rules providing for the investigation of any accident arising out of or in the course of the navigation—

Power of
Central
Government
to make
orders in
emergency.

- (a) in or over British India of any aircraft, or
- (b) anywhere of aircraft registered in British India.*

(2) Without prejudice to the generality of the foregoing power, such rules may—

(a) require notice to be given of any accident in such manner and by such person as may be prescribed;

(b) apply for the purposes of such investigation, either with or without modification, the provisions of any law for the time being in force relating to the investigation of accidents;

(c) prohibit pending investigation access to, or interference with, aircraft to which an accident has occurred, and authorize any person so far as may be necessary for the purposes of an investigation to have access to, examine, remove, take measures for the preservation of, or otherwise deal with any such aircraft; and

(d) authorize or require the cancellation, suspension, endorsement or surrender of any licence or certificate granted or recognized under this Act when it appears on an investigation that the licence ought to be so dealt with, and provide for the production of any such licence for such purpose.

8. (1) Any authority authorised in this behalf by the Central Government may detain any aircraft, if in the opinion of such authority—

Power to
detain air-
craft.

(a) having regard to the nature of an intended flight, the flight of such aircraft would involve danger to persons in the aircraft or to any other persons or property, or

[*—*] Substituted by Act XXXVII of 1939, S.5.

(b) such detention is necessary to secure compliance with any of the provisions of this Act or the rules applicable to such aircraft; or such detention is necessary to prevent a contravention of any rule made under clause (h), or clause (i) of sub-section (2) of section 5.

(2) The Central Government may, by notification in the official Gazette, make rules regulating all matters incidental or subsidiary to the exercise of the power.

Power of Central Government to make rules for protecting the public health.

*8-A. The Central Government may, by notification in the official Gazette, make rules for the prevention of danger arising to the public health by the introduction or spread of any infections or contagious disease from aircraft arriving at or being at any aerodrome and for the prevention of the conveyance of infection or contagion by means of any aircraft leaving an aerodrome and in particular and without prejudice to the generality of this provision may make, with respect to aircraft and aerodromes or any specified aerodrome, rules providing for any of the matters for which rules under sub-clauses (i) to (viii) of clause (p) of sub-section (1) of section 6 of the Indian Ports Act, 1908, may be made with respect to vessels and ports.

Emergency powers for protecting the public health.

†8-B. (1) If the Central Government is satisfied that India or any part thereof is visited by or threatened with an outbreak of any dangerous epidemic disease, and that the ordinary provisions of the law for the time being in force are insufficient for the prevention of danger arising to the public health through the introduction or spread of the disease by the agency of aircraft, the Central Government may take such measures as it deems necessary to prevent such danger.

(2) In any such case the Central Government may, without prejudice to the powers conferred by section 8-A, by notification in the official Gazette, make such temporary rules with respect to aircraft and persons travelling or things carried therein and aerodromes as it deems necessary in the circumstances.

(3) Notwithstanding anything contained in section 14, the power to make rules under sub-section (2) shall not be subject to the condition of the rules being made after previous publication, but such rules shall not remain in force for more than three months from the date of notification:

* Inserted by the Indian Aircraft (amendment) Act, 1936 (79 of 1936) S. 2.

† Inserted by the Indian Aircraft (amendment) Act, 1935 (22 of 1935) S. 2.

Provided that the Central Government may, by special order, continue them in force for a further period or periods of not more than three months in all.

9. (1) The provisions of Part VII of the Indian Merchant Shipping Act, 1923, relating to Wreck and Salvage shall apply to aircraft on or over the sea or tidal waters as they apply to ships, and the owner of an aircraft shall be entitled to a reasonable reward for salvage services rendered by the aircraft in like manner as the owner of a ship.

Wreck and salvage.

(2) The Central Government may, by notification in the official Gazette, make such modifications of the said provisions in their application to aircraft as appear necessary or expedient.

10. In making any rule under section 5, section 7, section 8* [section 8-A or section 8-B] the Central Government may direct that a breach of it shall be punishable with imprisonment for any term not exceeding three months, or with fine of any amount not exceeding one thousand rupees, or with both.

Penalty for act in contravention of rule made under this Act.

11. Whoever wilfully flies any aircraft in such a manner as to cause danger to any person or to any property on land or water or the air shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one thousand rupees, or with both.

Penalty for flying so as to cause danger.

12. Whoever abets the commission of any offence under this Act or the rules, or attempts to commit such offence, and in such attempt does any act towards the commission of the offence, shall be liable to the punishment provided for the offence.

Penalty for abetment of offences and attempted offences.

13. Where any person is convicted of an offence punishable under any rule made under clause (i) or clause (l) of sub-section (2) of section 5, the Court by which he is convicted may direct that the aircraft or article or substance, as the case may be, in respect of which the offence has been committed, shall be forfeited to His Majesty.

Power of Court to order forfeiture.

14. Any power to make rules conferred by this Act is subject to the condition of the rules being made after previous publication for a period of not less than three months.

Rules to be made after publication.

15. The provisions of section 42 of the Indian Patents and Designs Act, 1911, shall apply to the use of an invention on any aircraft not registered in British

Use of patented invention on aircraft not required in British India.

* Substituted by the Indian Aircraft (amendment) Act, 1938 (22 of 1938) S 3.

India in like manner as they apply to the use of an invention in a foreign vessel.

Power to
apply customs
procedure.

16. The Central Government may, by notification in the official Gazette, declare that any or all of the provisions of the Sea Customs Act, 1878, shall, with such modifications and adaptations as may be specified in the notification, apply to the import and export of goods by air.

Bar of
certain suits

17. No suit shall be brought in any Civil Court in respect of trespass or in respect of nuisance by reason only of the flight of aircraft over any property at a height above the ground which having regard to wind, weather and all the circumstances of the case is reasonable, or by reason only of the ordinary incidents of such flight.

Saving for
acts done in
good faith
under the
Act.

18. No suit, prosecution or other legal proceeding shall lie against any person for anything in good faith done or intended to be done under this Act.

Saving of
application of
Act.

19. (1) Nothing in this Act or in any order or rule made thereunder shall apply to or in respect of any aircraft belonging to or exclusively employed in His Majesty's naval, military or air forces, or to any person in such forces employed in connection with such aircraft.

(2) Nothing in this Act or in any order or rule made thereunder shall apply to or in respect of any light-house to which the Indian Lighthouse Act, 1927, applies or prejudice or affect any right or power exercisable by any authority under that Act.

20. Repealed by the Repealing Act, 1938 (1 of 1938) S. 2 and sch.

THE INDIAN AIRCRAFT RULES.

New Delhi, the 23rd March 1937.

No. V-26.—In exercise of the powers conferred by sections 5 and 7 and sub-section (2) of section 8 of the Indian Aircraft Act, 1934 (XXII of 1934), and section 4 of the Indian Telegraph Act, 1885 (XIII of 1885), and in supersession of the Indian Aircraft Rules, 1920, with the exception of Part IX thereof, the Governor General in Council is pleased to make the following rules, the same having been previously published, as required by section 14 of the former Act, namely :—

RULES.

PART I. —PRELIMINARY.

1. *Short title and extent.*—

- (1) These rules may be called the Indian Aircraft Rules, 1937.
- (2) They apply (unless the contrary intention appears) to all air craft for the time being in or over British India, provided that in the case of aircraft registered elsewhere than in British India, for the provisions of Parts IV, V, VI and IX of these rules relating to registration, licensing of personnel, airworthiness and log books there shall be substituted the regulations of the State in which the aircraft is registered.

2. *Nationality of aircraft.*—An aircraft shall be deemed to possess the nationality of the State on the register of which it is entered.

3. *Definitions and Interpretation.*—

- (1) In these rules, unless there is anything repugnant in the subject or context—
 - “Acrobatics” means any aerial manœuvres voluntarily accomplished other than those which are carried out in the course of normal flight;
 - “Aerial work aircraft” means aircraft used for an industrial or commercial purpose or any lucrative purpose other than public transport;
 - “Aerodrome” means any definite or limited ground or water area intended to be used, either wholly or in part, for the landing or departure of aircraft, and includes all buildings, sheds, vessels piers and other structures thereon or appertaining thereto;
 - “Aerodrome light” means any light exhibited at an aerodrome for the purpose of assisting the navigation or manœuvres of an aircraft or of signalling to or from an aircraft;
 - “Aerodyne” means an aircraft, whose support in flight is derived dynamically from the reaction on surfaces in motion relative to the air, and includes all aeroplanes, helicopters, gyroplanes, gliders and kites;

- "Aeroplane" means a mechanically driven aerodyne supported by aerodynamic reactions on surfaces remaining fixed under the same conditions of flight;
- "Aerostat" means an aircraft supported in the air statically and includes all airships and balloons;
- "Aircraft" means any machine which can derive support in the atmosphere from reactions of the air and includes balloons, whether fixed or free, airships, kites, gliders and flying machines;
- "Airship" means a mechanically driven aerostat, having means of directional control;
- "Balloon" means an aerostat, not provided with mechanical means of propulsion;
- "Contracting State" means any state which is for the time being a party to the Convention relating to the regulation of Aerial Navigation signed at Paris, October 13, 1919, with the additional Protocol, signed at Paris, May 1, 1920, and any amendment which may be made thereto under the provisions of Article 34 thereof;
- "Course" means the forward direction of the intersection of the plane of symmetry (supposed vertical) of an aircraft with a horizontal plane. It is defined by the angle which it makes with a meridian of origin. By extension the angle itself;
- "Export" means taking out of British India;
- "Flying machine" means a mechanically driven aerodyne, and includes all aeroplanes, helicopters and gyroplanes;
- "Glider" means an aerodyne supported in flight by aerodynamic reactions on surfaces remaining fixed under the same conditions of flight and not provided with mechanical means of propulsion;
- "Government aerodrome" means an aerodrome which is maintained by or on behalf of Government;
- "Import" means bringing into British India;
- "Landing area" means that part of an aerodrome reserved for the departure or landing of aircraft;
- "Making way": An aircraft is said to be "making way" when under way in the air or on the surface of the water, it has a velocity relative to the air or water respectively;
- "Military aircraft" includes naval, military and airforce aircraft; and every aircraft commanded by a person in naval, military or airforce service detailed for the purpose shall be deemed to be a military aircraft.
- "Normal flight" means flight comprising climbing, horizontal flight, turning and descending: provided, however, that it does not entail abrupt variations in height or in the attitude of the aircraft;
- "On the surface of the water": An aircraft is deemed to be "on the surface of the water" so long as any portion of it is in contact with the water;
- "Passenger aircraft," "mail aircraft" and "goods aircraft" mean aircraft which effect public transport of passengers, mails or goods, respectively;

"Personnel" in relation to any aircraft means the person in charge, pilot, navigator, engineer, and all other members of the crew;

"Private aircraft" means all aircraft other than aerial work aircraft or public transport aircraft;

"Prohibited area" means an area over which the navigation of aircraft is prohibited under rule 12.

"Public transport" means all carriage of persons or things effected by aircraft for a remuneration of any nature whatsoever, and all carriage of persons or things effected by aircraft without such remuneration if the carriage is effected by an air transport undertaking;

"Public transport aircraft" means an aircraft which effects public transport;

"State aircraft" includes military aircraft and aircraft exclusively employed in State service, such as posts, customs, police;

"Subsequent aircraft" means an aircraft which is constructed in accordance with the design and specification of a type of aircraft, which has been approved or accepted by the Governor General in Council for the issue of a certificate of airworthiness;

"Take off" includes all the successive positions of an aerodyne from the moment it moves from rest until the moment of starting normal flight;

"To land" is the action under normal conditions of making contact with the ground or a solid platform or water by an aircraft equipped for this purpose;

"Under way": An aircraft is said to be "under way" when, being in the air or on the surface of the water, it is not moored to the ground or to any fixed object on land or in the water;

"Under control": An aircraft is said to be "under control" when it is able to manœuvre as required by these Rules;

"Visible" as applied to lights means visible on a dark night with a clear atmosphere;

- (2) Any power or duty conferred or imposed by these rules on the Governor General in Council may be exercised or discharged by the Governor General in Council or by any person authorised by him in that behalf.

PART II.—GENERAL CONDITIONS OF FLYING.

4. *Use and operation of aircraft.*—No person shall use or operate or assist in using or operating an aircraft save in accordance with these rules.

5. *Registration and nationality and registration marks.*—No person shall fly, or assist in flying any aircraft unless—

- (a) it has been registered, and
- (b) it bears its nationality and registration marks and the name and residence of the owner affixed or painted thereon in accordance with rule 37, or, in the case of aircraft

registered elsewhere than in British India, in accordance with the regulations of the State in which it is registered :

Provided that the prohibition imposed by this rule shall not apply to aircraft flown in accordance with the special permission in writing of the Governor General in Council and subject to any conditions and limitations which may be specified in such permission.

6. *Licensing of personnel.*—Every aircraft shall carry and be operated by the personnel prescribed in Part V of these rules and such personnel shall be licensed in the manner prescribed in that Part :

Provided that in the case of aircraft not registered in British India, such personnel shall be licensed in accordance with the regulations of the State in which the aircraft is registered :

Provided further that this rule shall not apply to an aircraft flown by a person under instruction or undergoing tests for the purpose of obtaining or renewing a pilot's licence if—

- (a) the aircraft is flown within three miles of a licensed aerodrome or a Government aerodrome,
- (b) the aircraft carries no passengers, and
- (c) prior notice of the flight and of the purpose of the flight is given to the person in charge of the aerodrome from which the flight is made.

7. *Documents to be carried in aircraft.*—

(1) No person in charge of any public transport aircraft shall allow such aircraft to be flown unless the following documents are carried on board the aircraft, namely :—

- (i) the certificate of registration,
- (ii) the licences of the personnel,
- (iii) the certificate of airworthiness,
- (iv) the journey log book in cases where the keeping of a journey log book is prescribed in Part IX,
- (v) working copies of the aircraft and engine log books prescribed by Part IX, whenever the aircraft leaves its normal station,
- (vi) where radio-telegraph apparatus is carried in the aircraft, the permit or licence issued by the Director-General of Posts and Telegraphs, under which such apparatus is carried :

Provided that where a licence or other document has been submitted to a competent authority under these rules for renewal or other action, that fact shall be deemed a valid excuse for its not being carried on board the aircraft.

(2) No person in charge of any aircraft engaged in international navigation shall allow such aircraft to be flown unless the following documents issued by the State in which the aircraft is registered are carried on board the aircraft, namely :—

- (i) the certificate of registration,
- (ii) the licences of the personnel,
- (iii) the certificate of airworthiness,
- (iv) the journey log book,

- (v) the aircraft and engine log books,
- (vi) where radio-telegraph apparatus is carried in the aircraft, the permit or licence for such apparatus,
- (vii) where the aircraft carries passengers, a list of their names showing their places of origin and destination,
- (viii) where the aircraft carries goods, air consignment notes and manifests in respect thereof.

8. *Carriage of explosives and arms.*—No person in, or in charge of, an aircraft shall carry or permit to be carried therein, any explosives, articles of a highly inflammable nature, arms, ammunition, or military stores other than:—

- (a) such explosives or other articles as may be required for, and are not kept for any other purpose than, the working or handling of aircraft; and
- (b) subject to the provisions of the Indian Arms Act, 1878, and the rules made thereunder, and subject to such further restrictions as may be imposed by the owner of the aircraft regarding their carriage, such arms and ammunition as may reasonably be required for the private use of any person, either as personal luggage or as freight:

Provided that such explosives, articles, arms and ammunition, when carried in a passenger aircraft, shall be placed in a receptacle or receptacles not accessible to the passengers.

9. *Radio-telegraph Apparatus*—

- (1) No person shall operate radio-transmitting apparatus in any aircraft registered in British India unless he holds a licence of the type required by the provisions of Part V in respect of aircraft required or permitted by these rules to carry radio-telegraph or radio-telephone apparatus, as the case may be, and issued in accordance with those provisions.
- (2) Radio-transmitting apparatus carried in aircraft shall be operated under the conditions defined by the International Tele-communication Convention (Madrid 1932) and the general radio-communication regulations annexed thereto as far as these apply and shall be operated only during the hours in which such operation is permitted by the Governor General in Council.
- (3) Aircraft registered in British India and required or permitted by these rules to carry radio-telegraph apparatus shall be fitted with such apparatus in accordance with the provisions of Part VII.
- (4) Nothing in this rule shall exempt any person from those provisions of the Indian Telegraph Act, 1885, and the rules made thereunder which require that radio-telegraph apparatus shall be licensed.

10. *Mails.*—No person shall carry mails or allow mails to be carried in any aircraft except with the consent in writing of the Director-General of Posts and Telegraphs.

11. *Aerodromes.*—(1) No pilot or person in charge of any aircraft carrying passengers for hire or reward shall use any place for a series

of landings and departures, and no pilot or person in charge of any aircraft employed on a scheduled air transport service, shall use any place as a regular place of landing or departure other than an aerodrome licenced or approved for the purpose in accordance with the provisions of Part XI.

(2) No person being the proprietor of an aerodrome other than an aerodrome mentioned in sub-rule (1) shall permit the aerodrome to be used in contravention of that sub-rule.

(3) No person other than the occupant of an aircraft manœuvring in accordance with these rules may enter upon the landing area of an approved or licensed aerodrome without the consent of the person in charge of the aerodrome.

12. *Prohibited areas*—

(1) No person shall fly or assist in flying an aircraft over any of the areas specified in Schedule (I) save in accordance with the conditions specified in that schedule.

(2) Every pilot who, when flying an aircraft, finds himself above a prohibited area in contravention of sub-rule (1), shall, as soon as he is aware of the fact, give the signal of distress specified in sub-rule (2) of rule 107, and shall land the aircraft as soon as possible outside the prohibited area at one of the nearest aerodromes in British India :

Provided that he shall not, unless compelled by stress of weather or other unavoidable cause, fly further into the prohibited area nor commence to descend while still above the prohibited area.

(3) When the signals prescribed in rule 111 are given, the pilot of the aircraft shall immediately change his course and fly away from the prohibited area.

(4) When the signals prescribed in rule 110 are given, the pilot shall immediately give the signal referred to in sub-rule (2) of this rule and land the aircraft in accordance with that sub-rule.

13. *Photography from aircraft*.—No person shall take, or cause or permit to be taken from an aircraft any photograph of a prohibited area or of any part thereof, or of any object therein.

14. *Aerial work and public transport reserved for certain aircraft*.—No aircraft registered in accordance with Part IV in Category B shall be used as an aerial work aircraft or as a public transport aircraft :

Provided that the Governor General in Council may from time to time permit, and impose restrictions on the performance of aerial work or public transport by aircraft other than those registered in accordance with Part IV in Category A, and such restrictions shall be deemed to have been effectively imposed if they have been notified in writing to the owner or operator of such aircraft or by notification in the *Gazette of India*.

15. *Conditions to be complied with by aircraft in flight*.—No aircraft engaged in international navigation, passenger aircraft, goods aircraft or mail aircraft, and no aircraft let out for hire for the purpose of being flown by the hirer, shall be flown unless the following conditions are complied with namely :—

- (i) the aircraft shall be certified as airworthy and shall be maintained in airworthy condition in accordance with the provisions of Part VI or (in the case of an aircraft not registered in British India) in accordance with the regulations of the State in which the aircraft is registered;
- (ii) all the terms or conditions on which the certificate of airworthiness was granted shall be duly complied with;
- (iii) the aircraft shall carry on board its certificate of airworthiness and any other certificates prescribed by Part VI, or by the regulations of the State in which the aircraft is registered, which it is required to carry on board. The certificate of airworthiness shall be carried in the pocket of the journey log book;
- (iv) the aircraft shall be fitted with and shall have in working order such instruments and equipment as are prescribed in Part VI for an aircraft of that class or description:

Provided that the Governor-General in Council may, by order in writing and subject to such conditions as may be contained in the order, exempt any aircraft from the operation of this rule.

Explanation.—For the purpose of this rule, aircraft let out on payment for instructional or other purposes by a flying club or flying school to a member or pupil thereof shall be deemed to be let out for hire.

16. *Rules of the Air.*—Every pilot and navigator shall observe, and every person in charge of an aircraft shall cause to be observed, all the rules of the air contained in Part XII, and shall take all such steps as are practicable to secure that when the aircraft is in flight or is being manœuvred on the land or water, the windows, wind screens or side screens of the aircraft through which the pilot obtains his view forward or sideways are maintained in such condition as not to obscure his view.

17. *Production of licences, etc.*—Any licence, certificate, log book or document granted or required to be maintained under these rules shall, on demand for the purpose of inspection, by any magistrate, any police officer above the rank of constable, any customs officer, any commissioned officer of His Majesty's naval, military or air forces, any non-commissioned officer of the Royal Air Force, any gazetted officer of the Civil Aviation Department, or any other person authorised by the Governor General in Council by special or general order in writing in this behalf, be produced by the licensee or, in the case of an aircraft or of a licensed aerodrome, by the owner, hirer or person in charge thereof:

Provided that any such licence, certificate, log book, or document relating to an aircraft or its personnel which is not by these rules required to be carried in the aircraft shall be produced within seven days of the making of the demand.

18. *Prevention of flights in contravention of the rules—*

- (1) An authority authorised under section 8 of the Indian Aircraft Act, 1934, to detain aircraft may do so by the issue of a written direction to the pilot or other person for the

time being in charge of the aircraft to be detained, or by taking such other steps as may be necessary to make the detention effective. If an aircraft detained by a person so authorised is housed or kept at a Government aerodrome, the housing or picketing charges normally applicable shall be payable in respect of the whole period during which it is detained.

- (2) Any person acting in contravention of any direction given under this rule shall, without prejudice to any other penalty he may incur, be deemed to have acted in contravention of these rules.

19. *Cancellation, suspension or endorsement of licences and certificates—*

- (1) Where any person is convicted of a contravention of or failure to comply with these rules in respect of any aircraft, the Governor General in Council may cancel or suspend any certificate of registration granted under these rules relating to that aircraft.
- (2) The Governor General in Council may cancel or suspend any certificate relating to the airworthiness of an aircraft granted under these rules if he is satisfied that reasonable doubt exists as to the safety of the aircraft in question or of the type to which the aircraft in question belongs and may vary the conditions attached to any such certificate if he is satisfied that those conditions may properly be relaxed or that reasonable doubt exists whether those conditions afford a sufficient margin of safety.
- (3) The Governor General in Council may for reasons which shall be recorded in writing cancel, suspend or endorse any certificate or licence granted under these rules if he is satisfied that there is sufficient ground for so doing and may suspend any such certificate or licence temporarily during the investigation of any matter forming a ground for action under this sub-rule.
- (4) The Governor General in Council may cancel or vary any particulars entered by him or under his authority in any licence or certificate granted or in any journey log book issued under these rules.
- (5) The Governor General in Council may require the holder of any license, certificate or other document granted or issued under these rules or any person having possession or custody of such licence, certificate or document to surrender the same to him for cancellation, suspension, endorsement or variation and any person failing to comply with any such requirement within a reasonable time shall be deemed to have acted in contravention of these rules.

20. *Certain rules not applicable to gliders and kites.*—Rules 5, 6, 7, 12, 15, 17, 19 and 25 shall not apply to gliders, and rules 5, 6, 7, 12, 15, 17, 19 and the rules in Part III, with the exception of rule 26 in so far as it relates to the dropping of articles from aircraft, shall not apply to kites.

PART III.—GENERAL SAFETY CONDITIONS.

21. *Dangerous flying.*—No person shall fly any aircraft in such circumstances as, by reason of low altitude or proximity to persons or dwellings or for any other reason, to cause unnecessary danger to any person or property.

22. *Flying over cities, etc.*—No pilot shall fly any aircraft, and no person in charge of any aircraft shall allow it to be flown over any city, town, village site or other populous area except at such altitude, which in no case shall be less than 1,000 feet, as will enable the aircraft to land outside the city, town, village site or other populous area in the event of an emergency :

Provided that this prohibition shall not apply within a distance of one mile from a licensed aerodrome or a Government aerodrome.

23. *Acrobatics*—

(1) No person shall use any aircraft for acrobatics—

- (a) when flying over any city, town, village site or populous area; or
- (b) when flying over any meeting for public games or sports or other public assembly, except where a request for such flying has been made in writing by the promoters of such meeting or assembly.

(2) When an aircraft is used for acrobatics—

- (a) it shall be flown by a licensed pilot, or if it is flown by a person for the purpose of qualifying for a licence under these rules, such person shall be accompanied by a licensed pilot instructor;
- (b) if passengers are carried, whether the carriage is public transport or not, their previous consent to the performance of acrobatics shall be obtained in writing;
- (c) the pilot or person in charge of the aircraft shall satisfy himself before commencing the flight that every person carried in the aircraft, is properly secured by safety belts; and
- (d) the acrobatics shall be concluded at a height above the ground not less than 2,000 feet, or such lower altitude as the Governor General in Council may permit by special order in writing.

24. *Prohibition of intoxicated persons entering aircraft.*—No person acting as, or carried in an aircraft for the purpose of acting as pilot, commander, navigator, engineer or operating member of the crew thereof, shall, while so acting or carried, be in a state of intoxication or in a state in which, by reason of his having taken or used any sedative, narcotic or stimulant drug or preparation, his capacity so to act is impaired; and no other person while in a state of intoxication shall enter or be in any aircraft.

25. *Smoking in aircraft*—

(1) The owner of every aircraft registered in British India which is provided with a certificate of airworthiness shall cause to be exhibited in a prominent place in the aircraft a notice stating where and to what extent smoking is prohibited or permitted therein.

(2) A notice permitting smoking in such aircraft may be exhibited therein only if smoking in the aircraft is permitted by the certificate of airworthiness of the aircraft or by the direction of the Governor General in Council and only in accordance with the conditions relating to smoking contained in such certificate or direction.

(3) No person shall smoke in any aircraft registered in British India which is provided with a certificate of airworthiness unless a notice permitting smoking is exhibited in the aircraft, and any person smoking shall comply with all the terms of such notice.

26. *Parachute descents and dropping of articles.*—No person shall, except in a case of emergency, descend by means of a parachute from an aircraft and no person shall drop or cause or permit to be dropped from an aircraft any article, whether attached to a parachute or not, unless the descent is made or the article is dropped in accordance with and subject to any conditions or limitations contained in a general or special order of the Governor General in Council in writing in that behalf:

Provided that nothing in this rule shall be deemed to prevent the dropping of—

- (a) ballast which is not prohibited by the provisions of Rule 114;
- (b) message bags, smoke producing or other apparatus or materials dropped for the purpose of navigating an aircraft or communicating messages from an aircraft, subject to the observance of such precautions as to the nature of the articles dropped and the place of dropping as will avoid risk of injuring persons or property on the ground;
- (c) separate sheets of paper containing printed matter in any place if the written permission of the District Magistrate or, in a Presidency town or Rangoon, of the Commissioner of Police is first obtained in each case.

27. *Carriage of persons in unauthorised parts of aircraft.*—No person shall at any time be carried on the wings or undercarriage of the aircraft, or on or in any other part thereof which is not designed for the accommodation of the personnel or passengers, or on or in anything attached externally to the aircraft;

Provided that—

- (a) nothing in this rule shall prevent a person having temporary access—
 - (i) to any part of the aircraft for the purpose of executing repairs to the aircraft or adjusting the machinery or equipment thereof or for the purpose of doing anything which may be necessary for the safety of the aircraft or persons or goods carried therein; or
 - (ii) to any part of the aircraft in which goods or stores are being carried and to which proper means of access is provided; and
- (b) a person may be carried on or in any part of the aircraft, or anything attached thereto, with the permission in writing of the Governor General in Council and subject to any conditions which may be specified in such permission.

28. *Prohibition on persons under seventeen having sole control of aircraft.*—No person, being under seventeen years of age, shall have sole control of an aircraft in motion, and no person shall cause or permit any other person to have sole control of an aircraft in motion unless he knows or has reasonable cause to believe such other person to have attained the age of seventeen years.

29. *Acts likely to imperil the safety of aircraft.*—No person shall interfere with the pilot or with a member of the operating crew of an aircraft, or tamper with the aircraft or its equipment or conduct himself in a disorderly manner in an aircraft or commit any act likely to imperil the safety of an aircraft or its passengers or crew.

PART IV.—REGISTRATION AND MARKING OF AIRCRAFT.

30. *Certificate of Registration*—

(1) The authority empowered to register aircraft and to grant certificates of registration in British India shall be the Governor General in Council.

(2) An aircraft may be registered in British India in one or other of the following Categories, namely:—

(a) *Category A.*—If the aircraft is wholly owned either—

(i) by British subjects or persons under His Majesty's protection, or

(ii) by a company or corporation registered within and having its principal place of business within His Majesty's dominions; and

(b) *Category B.*—if the aircraft is wholly owned either—

(i) by persons, resident in or carrying on business in British India, who are not British subjects nor persons under His Majesty's protection, or

(ii) by a company or corporation registered elsewhere than within His Majesty's dominions and carrying on business in British India.

(3) No aircraft in respect of which the conditions required in sub-rule (2) are not satisfied, and no aircraft which is already validly registered in another country, shall be registered in British India.

31. *Nature of application*—

(1) Every application for a certificate of registration shall be accompanied by—

(a) such particulars relating to the aircraft as may be required;

(b) the fee prescribed in rule 35, which fee shall be returned if the application is not granted;

(c) in the case of aircraft imported by air, a certificate signed by a Chief Customs-Officer or Customs-Collector that the customs duty leviable in respect of it has been paid. Such certificate shall state the type and manufacturer's number of the aircraft and engine, and if the aircraft has been registered elsewhere, its registration markings.

- (2) An applicant for a certificate of registration may be required to produce proof of the truth of the statements contained in his application.

32. *Aircraft imported by air.*—When an application is made for the registration of an aircraft before its import into India for the purpose of the import of the aircraft by air, a temporary certificate of registration will, subject to the conditions of sub-rule (3) of rule 30, be granted by the Governor General in Council on the owner of the aircraft complying with clauses (a) and (b) of sub-rule (1) of rule 31. Such temporary certificate shall be valid only until the first landing of the aircraft at a Customs aerodrome in British India, when the certificate shall be delivered by the pilot or other person in charge to the local Aerodrome Officer. Thereafter, on production by or on behalf of the owner of the aircraft of the certificate mentioned in clause (c) of sub-rule (1) of rule 31, the certificate of registration shall be granted by the Governor General in Council:

Provided that, if an aircraft in respect of which a temporary certificate of registration has been issued is imported otherwise than by air, such temporary certificate shall cease to be valid on the date of import of the aircraft, and the temporary certificate shall forthwith be delivered by the owner to the Director of Civil Aviation in India, and thereafter the certificate of registration shall be granted by the Governor General in Council.

33. *Change in ownership.*—In the event of any change in the ownership of a registered aircraft, or if a registered aircraft ceases to be owned wholly either by persons or by a company or corporation fulfilling the conditions set out in rule 30, then—

- (1) the registered owner of the aircraft shall forthwith notify the Director of Civil Aviation in India of such change of ownership or, as the case may be, that the aircraft has ceased to be so owned as aforesaid; and
- (2) the registration and the certificate thereof shall lapse, as from the date of such change of ownership, or the date on which the aircraft ceased to be so owned.

34. *Aircraft destroyed or withdrawn from use.*—When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall as soon as possible notify the Director of Civil Aviation in India accordingly, and the registration and the certificate thereof shall lapse as from the date of such notification.

35. *Registration Fees.*—A fee of twenty rupees shall be payable in respect of a certificate of registration:

Provided that, where the aircraft has been previously registered in British India and the Governor General in Council is satisfied—

- (a) that the certificate of registration last issued in respect of the aircraft has lapsed by reason of the sale of the aircraft by the registered owner; and
- (b) that the registered owner of the aircraft immediately before the sale was the constructor thereof or a dealer in aircraft; and
- (c) that the aircraft has not been flown since a certificate of registration was last issued in respect thereof, except for the purpose of—

- (i) an experiment or test carried out in the ordinary course of construction or in order to obtain a certificate of airworthiness; or
 - (ii) a demonstration to a prospective purchaser; or
 - (iii) delivering the aircraft to a purchaser;
- a fee of four rupees only shall be payable.

36. *Register of Aircraft.*—The register of aircraft registered in India shall be open to inspection by members of the public at such times and subject to such conditions as may be specified by the Director of Civil Aviation in India.

37. *Nationality and Registration Marks, how to be affixed—*

- (1) The nationality mark of an aircraft registered in India shall be the capital letters VT in Roman characters, and the registration mark shall be a group assigned by the Governor General in Council of three capital letters in Roman characters.

- (2) The nationality and registration marks shall be painted on the aircraft in the following manner:—

- (a) *Aerostats.*—In the case of airships the marks shall be painted near the maximum cross-section so as to appear on both sides and on the upper surface equidistant from the letters on the sides.

In the case of balloons the marks shall appear twice near the maximum horizontal circumference of a spherical balloon and shall be placed as far possible from one another and, on a non-spherical balloon, near the maximum cross-section on both sides immediately above the rigging band on the points of attachment of the basket suspension cables.

In the case of all aerostats, the side marks shall be visible both from the sides and from the ground.

- (b) *Aeroplanes.*—The marks shall be painted once on the lower surface of the main plane structure and once on the upper surface of the main plane structure, the top of the letters to be towards the leading edge. They shall also be painted along each side of the fuselage or of the body between the main planes and the tail planes.

The marks shall be painted on each side of the fuselage or of the body.

- (c) *Other aerodynes.*—The provisions of clause (b) shall be applicable to other aerodynes in so far as the latter comprise corresponding elements on which marks could be placed.

- (3) The marks shall be of such a colour in relation to the colour of the background on which they are painted as will render them clearly legible at a distance of not less than 250 yards in a clear atmosphere.

- (4) The height of the letters of the nationality and registration marks need not exceed eight feet. Subject as aforesaid, the height of the marks shall be as follows:—

- (a) *Aerostats.*—In the case of airships the height of the marks shall be equal to at least one-twelfth of the perimeter of the airship at the maximum cross-section.

In the case of balloons the height of the marks shall be equal to at least one-fifteenth of the maximum horizontal circumference of a spherical balloon and to at least one-twelfth of the perimeter of a non-spherical balloon at the maximum cross-section.

(b) *Aeroplanes*.—The marks to be borne on the wings and the fuselage or body shall, as regards each group of marks, be formed of letters of equal height, as large as possible without however touching the visible outline of the wings, fuselage or body.

(c) *Gyroplanes*.—The marks to be borne on the fuselage or body shall, as regards each group of marks, be formed of letters of equal height, as large as possible without however touching the visible outline of the fuselage or body.

(d) *Other aerodynes*.—The provisions of clause (b) shall be applicable to other aerodynes in so far as the latter comprise corresponding elements on which marks could be placed.

(5) As nearly as the constructional features of the aircraft admit—

(a) the width of the letters shall be two-thirds of their height;

(b) the thickness of the letters shall be one-sixth of their height; and

(c) except as provided in sub-rule (6), a space equal to one-half the width of the letters shall be left between the letters.

The letters shall be painted in plain block type and shall be uniform in shape and size.

(6) A hyphen of a length equal to the width of one of the letters shall be painted between the nationality mark and the registration mark.

(7) The nationality and registration marks shall be displayed to the best possible advantage, taking into consideration the constructional features of the aircraft. The marks shall always be kept clean and visible.

(8) The aircraft shall carry affixed to the car or basket or to the fuselage, in a prominent position, a metal plate which shall be of stainless steel and shall be inscribed with the names and residence of the owner and the marks of nationality and registration.

PART V.—PERSONNEL OF AIRCRAFT.

38. *Personnel to be carried in flying machines*.—Subject to the provisions of rule 6, every flying machine registered in British India shall comply with such of the following requirements in respect of the personnel which it carries and by which it is operated as are applicable to the class of flying machine to which it belongs:—

(1) *Private Pilot*.—Every private flying machine shall be flown by a person holding a Private Pilot's licence ("A")

licence) or a Public Transport Pilot's licence ("B" licence) issued in accordance with sub-rules (1) and (3), respectively of rule 41 :

Provided that a flying machine, which is carrying a passenger or passengers other than a person licensed to give instruction in flying in accordance with sub-rule (3) of this rule, may not be flown by a person holding only a Private Pilot's licence ("A" licence) unless he has had not less than 25 hours solo flying experience, has a certificate from a licensed pilot instructor that he is considered sufficiently qualified for the purpose and has previously flown a flying machine of the same type and has satisfactorily completed 3 landings and 3 take-offs therein.

(2) *Public Transport or aerial work pilot.*—Every public transport or aerial work flying machine shall be flown by a person holding a Public Transport Pilot's licence ("B" licence) issued in accordance with sub-rule (3) of rule 41 :

Provided that within British India, such flying machine, when flying by day and when not employed on a regular scheduled air service, may be flown by a person holding an "A" licence which has been specially endorsed in accordance with sub-rule (2) of rule 41 ("A-1" licence) :

Provided further that such flying machine may be flown at any time or place within British India by the holder of a "B" licence or of an "A-1" licence if the holder of a "B" licence endorsed for the particular type of flying machine is in the cockpit and is able to take control of the flying machine :

Provided further that a flying machine, the property of or being used by a duly constituted flying club, carrying a member of the club otherwise than for the purpose of instructing such member in flying, shall not, for the purpose of this rule, be deemed to be flown for public transport notwithstanding that payment may be made to the flying club for such carriage, unless payment is made either directly or indirectly to the pilot of the flying machine or the pilot of the flying machine is a paid employee of the flying club in which case the aircraft shall be deemed to be flown for public transport.

(3) *Pilot instructor.*—Every flying machine which is being used for the purpose of giving instruction in piloting shall carry, except when flown solo by a pupil under instruction, a person holding a "B" licence which has been specially endorsed for instructional purposes in accordance with sub-rule (4) of rule 41, and no other person may impart, for a remuneration of any nature whatsoever, instruction in piloting flying machines :

Provided that the holder of a "B" licence which has not been so endorsed may, when acting as assistant to a licensed pilot instructor, impart such instruction but shall in no case authorise a person under instruction to perform his

first solo flight nor give instruction in any form of acrobatics.

Explanation.—A person acting as assistant to a licensed pilot instructor shall not be deemed to have ceased to be so acting by reason only of the absence of the pilot instructor, if such absence does not exceed seven consecutive days, but, where such absence exceeds seven consecutive days, he shall not continue so to act without a written authorisation from the Governor General in Council.

(4) *Second Class Navigator.*—Every flying machine used for international public transport and having to fly without landing—

- (i) by day, more than 100 miles over inhabited regions, or more than 100 miles but not more than 600 miles entirely over the high seas or uninhabited regions, or
 - (ii) by night, more than 15 miles but not more than 600 miles,
- shall have on board a navigator holding a second or first class navigator's licence.

(5) *First Class Navigator.*—Every flying machine used for international public transport and having to fly without landing—

- (i) by day, more than 600 miles entirely over the high seas or uninhabited regions, or
 - (ii) by night, more than 600 miles,
- shall have on board a navigator holding a first class navigator's licence.

(6) *Pilot or other member of crew as Navigator.*—(a) In either of the following cases, namely—

- (i) when the pilot of a flying machine, required by sub-rule (4) or sub-rule (5) of this rule to carry a navigator himself holds a navigator's licence of the required class and there is on board a second pilot capable of flying the machine in case of need,
- (ii) when there is on board such flying machine a member of the crew additional to the pilot who holds such navigator's licence,

a navigator shall not be required to be carried in addition to such pilot or member of the crew.

(b) When the pilot of a flying machine, required by sub-rule (4) or sub-rule (5) of this rule to carry a navigator, himself holds a navigator's licence of the required class but there is on board no second pilot capable of flying the machine in case of need, a navigator holding a licence of the required class shall be carried in addition to the pilot except in the case of—

- (i) night flights over routes suitably marked and recognised as such by the competent authorities,
- (ii) day flights over inhabited regions,
- (iii) day flights of not more than six hundred miles over the high seas or uninhabited regions.

(7) In sub-rules (4), (5) and (6) of this rule—

- (i) "uninhabited region" means a region where, in consequence of the sparsity of the population, and of the absence of natural landmarks or of the insufficiency of the maps, the difficulties of navigation are similar to those met with over the high seas;
- (ii) "night" means, the period commencing one hour after sunset and terminating one hour before sunrise;
- (iii) "flight over the high seas" means a flight in the course of which an aircraft finds itself over the sea at a distance of more than 50 miles from the nearest point of the coast.

(8) *Radio-telegraph Operator's Licence*.—An aircraft which is required by these rules to carry radio-telegraph apparatus shall carry, in addition to the pilot and whether or not it participates in the international service of public correspondence, a person holding either a first class or a second class radio-telegraph operator's licence issued in accordance with this Part to operate radio-telegraph apparatus on aircraft.

(9) *Radio-telephone Operator*.—An aircraft which is required by these Rules to carry radio-telegraph apparatus and which communicates by radio-telephony, shall carry a person holding a first class radio-telegraph operator's licence.

Provided that an aircraft, which carries radio-telephone apparatus and which communicates solely by radio-telephony, may carry, instead of a person holding a first class radio-telegraph operator's licence, a radio-telephone operator licensed in accordance with this Part to operate radio-telephone apparatus on aircraft.

39. *Licensing authority*.—The authority by which the licences referred to in rule 38 may be granted, renewed or varied shall be the Governor General in Council who may withhold the grant or renewal of a licence if for any reason he considers it desirable to do so.

40. *Signature of licence-holder*.—On the issue of a licence to an applicant he shall forthwith sign his name on the licence as the holder thereof with his ordinary signature.

41. *Proofs of competency*.—Applicants for licences shall be required to produce proofs of having the following practical experience and of having passed satisfactorily the following tests and examinations:—

(1) *Private Pilot's Licence ("A" Licence)*.—Flying Experience, Flying Tests, Technical Examination and Medical Examination as laid down in Section A of Schedule II:

Provided that for the purpose of the grant of such licence:—

- (a) a person who is qualified as a Royal Air Force Pilot may be exempted from the flying tests and may be exempted from the medical examination on production of a certificate from a Royal Air Force Medical Officer that he is fit for flying duties and is up to the standard required for an "A" licence;

(b) a person to whom a licence of a corresponding or higher class has been granted by the competent authority in a contracting State may be exempted from all or any of the flying tests and from subjects (a) and (b) of the technical examination, and may, if he is the holder of a current licence, be exempted from the medical examination ;

(c) a licence may be issued for all types of flying machines or endorsed for one or more types only.

(2) *Pilot's Licence endorsed for limited transport of goods and passengers within India ("A-1" Licence).*—Flying Experience, Flying Tests, Technical Examination and Medical Examination as laid down in Section B of Schedule II :

Provided that for the purpose of the grant of such licence—

(a) a person who is qualified as a Royal Air Force Pilot may be exempted from the flying tests and from the technical examination on flying machines, engines, instruments and elementary navigation, specified in Section B of Schedule II ; and an examination by a Royal Air Force Medical Officer at which the candidate was passed fit for full flying duties may be accepted in lieu of the medical examination ;

(b) the requirements in respect of flying experience may be varied by the Governor General in a case where the flying experience of the applicant is in the opinion of the Governor General in Council substantially the equivalent of the flying experience specified in Section B of Schedule II ;

(c) such licence shall be endorsed for such types of flying machine only as the candidate has produced proof of his competence to fly.

(3) *Public Transport Pilot's Licence ("B" Licence).*—Flying Experience, Flying Tests, Technical Examination and Medical Examination as laid down in Section C of Schedule II :

Provided that for the purpose of the grant of such licence—

(a) a person who is qualified as a Royal Air Force Pilot may be exempted from the flying tests (but not from any of the required flying experience) and from the technical examination on flying machines, engines, and instruments specified in Section C of Schedule II ; and an examination by a Royal Air Force Medical Officer at which the candidate was passed fit for full flying duties may be accepted in lieu of the medical examination ;

(b) a person to whom a licence of a corresponding class has been granted by the competent authority in any one of His Majesty's Dominions may be exempted from all or any of the flying tests, and from subjects (a) to (e) and (g) of the technical examination, and may, if he is the holder of a current licence, be exempted from the medical examination ;

(c) the requirements in respect of flying experience may be varied by the Governor General in Council in a case where in his opinion the flying experience of the applicant is substantially the equivalent of that specified in Section C of Schedule II;

(d) such licence shall be issued for such types of flying machine only as the candidate has produced proof of his competence to fly, provided that for industrial purposes other than public transport, a licence may be issued for any or all types of flying machines.

(4) *Public Transport Pilot's Licence endorsed for instructional purposes (Pilot Instructor's Licence).*—Flying Experience, Flying Tests, Technical Examination and Medical Examination as laid down in Section D of Schedule II.

(5) *Navigator's licence 1st class and 2nd class.*—Flying Experience, Technical Examination and Medical Examination as laid down in Section E of Schedule II:

Provided that, for the purpose of the grant of such licences, a person to whom a licence of a corresponding class has been granted by the competent authority in any one of His Majesty's dominions, may be exempted from the technical examination and may, if he is the holder of a current licence, be exempted from the medical examination.

(6) *Radio-telegraph Operator's Licences—*

(a) *First Class Licence—*

Flying Experience and Medical Examination.—As laid down in Section F of Schedule II.

Technical Qualifications.—The candidate must be the holder of a first class certificate of competency as a wireless operator issued by the Director General, Posts and Telegraphs, India, or of such other certificate of proficiency as a wireless operator as may be accepted by the Director General of Posts and Telegraphs in lieu thereof.

(b) *Second Class Licence—*

Flying Experience and Medical Examination.—As laid down in Section F of Schedule II.

Technical Qualifications.—The candidate must be the holder of a second class certificate of competency as a wireless operator issued by the Director General of Posts and Telegraphs, India, or of such other certificate of proficiency as a wireless operator as may be accepted by the Director General of Posts and Telegraphs, India, in lieu thereof.

(c) *Radio-telephone Operator's Licence—*

Flying Experience and Medical Examination.—As laid down in Section F of Schedule II.

Technical Qualifications.—The candidate must be the holder of a certificate of proficiency as radio-telephone operator issued by the Director General of Posts and Telegraphs,

India, which has been specially endorsed for air operations, or of such other certificate of proficiency as a radio-telephone operator as may be accepted by the Director-General of Posts and Telegraphs, India, in lieu thereof :

Provided that a candidate for a radio-telegraph operator's licence who has not had the required air experience may be granted a provisional licence for a period not exceeding one year in order to enable him to acquire the necessary air experience.

42. *Periods of validity of licences :—*

(1) The licences may be granted, and on each occasion of renewal may be renewed, for any period not exceeding the periods shown below :—

(a) Pilot's "A" Licence.—Twelve months.

(b) Pilot's "A-1" Licence.

(c) Pilot's "B" Licence.

(d) Pilot Instructor's Licence.

} Six months in the case of a
licence granted to a male.
Four months in the case
of a licence granted to a
female.

(e) Navigator's Licence.—Twelve months.

(f) Radio-telegraph Operator's Licence.— Twenty-four months.

(2) The holder of a licence shall, in any one of the following circumstances, be required to undergo a fresh medical examination, wholly or in part, and to produce a certificate of medical fitness as a condition of the licence remaining valid, namely :—

(i) in the event of sickness involving incapacity for a period twenty days or more for the work for which he is licensed ; or

(ii) in the event of an accident occurring otherwise than during the performance of such work and involving the same in capacity ; or

(iii) in the event of an accident occurring during the performance of such work and involving injury ; or

(iv) if the holder of a licence has performed a total of 125 hours' flying in the capacity of pilot of a flying machine within any period of thirty consecutive days since his last medical examination under these Rules.

43. *Renewal of licences.*—Licences may be renewed for the periods specified in Rule 42 on production of proof of recent flying experience and after the passing of the medical examination as laid down in Schedule II :

Provided that in the case of a member of the operating crew of an aircraft engaged in public transport or aerial work, who is on duty in a region distant from official medical centre, the medical examination may exceptionally at the discretion of the Governor General in Council, be deferred for two consecutive periods of three months each on condition that such member obtains locally in each case and forwards to the

Director of Civil Aviation in India a favourable medical certificate furnished by a medical practitioner who possesses qualifications entitling him to inclusion in the Medical Register of Great Britain :

Provided further that the holder of any licence may be required before the renewal of the licence to satisfy all or any of the requirements which are applicable on the first grant of a licence of the same class :

Provided further that in the case of a pilot's licence the Governor General in Council may, when renewing the licence restrict the types of aircraft for which the licence is endorsed to those on which he is satisfied that the holder of the licence has had recent reasonable flying experience.

44. *Aircraft not registered in British India.*—An aircraft not registered in British India shall carry the personnel prescribed by the laws of the State in which it is registered and such personnel shall be licensed in accordance with the laws of that State.

45. *Validation of foreign licences.*—When a licence has been granted by the duly competent authority in any part of His Majesty's dominions outside British India or in any foreign State and is for the time being in force the Governor General in Council may, subject to such conditions and limitations and for such periods as he shall think fit, confer on such licence the same validity for the purpose of flying aircraft registered in British India as if it had been granted under these Rules and a licence so validated shall be subject to the provisions of Rule 19.

46. *Renewal, variation or validation of licences outside British India.*—If a licence granted under these rules is varied or renewed in conformity with the provisions of these rules, or if a licence is validated for the purpose of flying aircraft registered in British India in conformity with the provisions of Rule 45, by an authority outside British India specified by the Governor General in Council in this behalf, such variation, renewal or validation shall have effect in British India as though the licence had been varied, renewed or validated by a person authorised in this behalf under sub-rule (2) of Rule 3.

47. *Age of applicants.*—Licences shall not be granted to applicants who at the time of qualification do not comply with the following conditions :—

- (a) An applicant for a Pilot's "A" Licence shall have attained the age of 17 years.
- (b) An applicant for a Pilot's "A-1" Licence or for a Pilot's "B" Licence shall have attained the age of 19 years and shall not be more than 45 years of age.
- (c) An applicant for a Navigator's Licence shall have attained the age of 19 years and shall not be more than 50 years of age.
- (d) An applicant for a Radio-telegraph Operator's Licence shall have attained the age of 19 years :

Provided that, at the discretion of the Governor General in Council, a relaxation may be made as regards the upper age-limit :—

- (i) in the case of an applicant for a Pilot's "A-1" Licence or for a Pilot's "B" Licence, if before the date of his application he has been in service as pilot of a State flying machine, or

- (ii) in the case of an applicant for a navigator's licence, if up to the date of his application he has been in service as an operative member of the crew of an aircraft.

48. *Fees.*—The following fees shall be payable in respect of the issue, validation or renewal of licences or the issue of duplicate licences and the tests and examinations laid down in Rules 41 to 43:—

Fees.

	Flying Test	Official Technical Examination (if required)	Official Medical Examination		Licence
			For issue of licence	For renewal of licence or if required under sub-rule (2) of rule 42	
		Rs.	Rs.	Rs.	Rs.
Pilot's "A" Licence ...	*	5	16	8	5
Pilot's "A-1" Licence ...	*	20	32	16	5
Pilot's "B" Licence ...	*	30	32	16	5
Pilot Instructor's Licence ...	*	10	32	16	5
Navigator's Licence, 1st Class ...	...	75	32	16	5
Navigator's Licence, 2nd Class ...	...	30	32	16	5
Wireless Operator's Licence...	...	...	16	8	5

*For all flying tests the candidate shall be required to provide the aircraft and pay all charges incurred thereby, and in addition he shall pay, when an official examiner is carried on board during flying tests, a fee at the rate of Rs. 10 for each hour or part of an hour so flown:

Provided that an applicant for the issue or renewal of a Pilot's "A-1" or Pilot's "B" Licence who is required to undergo some part only of the technical examination shall pay a fee of Rs. 10 in respect of each group of subjects as shown in Schedule II in which he is examined, and an applicant for the variation of such a licence by the addition of a type of aircraft not already endorsed on the licence shall, if required to be examined on that type of aircraft, pay a fee of Rs. 5:

Provided further that in any other case when an applicant is required to undergo some part only of the technical examination, the fee may be reduced by such amount as the Governor General in Council may think proper in the circumstances of the case.

(2) An application for any licence or for the renewal or validation of any licence shall be accompanied by a Treasury receipt for the sum necessary to cover all the fees payable, except the fees for the official medical examination and the fees for the official examiner for a flying test if not a Government servant which shall be payable direct to the examiner.

(3) When in any case the licence is not issued or renewed or validated, the Governor General in Council may refund to the applicant such proportion of the sum paid as represents the cost of any examination not carried out or any licence not issued.

PART VI.—AIRWORTHINESS.

49. *Standard of airworthiness.*—A certificate of airworthiness may be issued by the Governor General in Council of respect of any flying machine which complies with the minimum standards of airworthiness prescribed in the United Kingdom in respect of design, materials, methods of construction and equipment, and the owner of a flying machine in respect of which a certificate of airworthiness is required by these Rules, or is applied for or issued, shall submit such evidence relating thereto and shall submit to such inspection and tests of the flying machine as may be required by the Governor General in Council:

Provided that the Governor General in Council may, in respect of any flying machine or class of flying machines, from time to time prescribe modifications of the standard and such modified standard shall be complied with as a condition of the issue or remaining in force of a certificate of airworthiness in respect of the flying machine or class of flying machines.

50. *Acceptance of foreign standards.*—The Governor General in Council may, in respect of any flying machine, accept as evidence of compliance with the conditions of rule 49 a valid certificate of airworthiness issued by the competent authorities in any other part of His Majesty's Dominions or in any foreign country, provided is it shown to his satisfaction that the conditions on which such certificate of airworthiness was granted are substantially equivalent to the conditions on which a certificate of airworthiness is granted by His Majesty's Government in the United Kingdom.

51. *Categories and sub-divisions.*—A certificate of airworthiness may be issued in respect of one or more of the categories and sub-divisions of flying machines specified in Section A of Schedule III and the operations of the flying machine shall be restricted to those authorised for the categories to which the certificate of airworthiness extends.

52. *Instruments and equipment—minimum.*—A certificate of airworthiness shall not be granted in respect of any flying machine which is not equipped with the following instruments and equipment, which shall be in working order, namely:—

Air speed indicator.

Altimeter.

Revolution indicator.

Such gauges as may be considered necessary by the Governor General in Council for the particular installation.

Safety belts or harness for the pilot and for each person carried in an open cockpit.

(In amphibian flying machines and in flying machines fitted with a retractable undercarriage) indicator of position of landing wheels.

53. *Instruments and equipment for flight.*—Every flying machine which is required by these Rules to be provided with a certificate of

airworthiness, shall, when flying, be fitted or equipped with the instruments and equipment specified in Section B of Schedule III according to the circumstances of the flight. The instruments and equipment shall be of types approved by the Governor General in Council, they shall be installed in a manner approved by him and shall be maintained in working order.

54. *Weight.*—Every flying machine which is required by these Rules to be certified as airworthy shall be weighed and marked in accordance with the provisions of Section C of Schedule III.

55. *Period of validity of certificates of airworthiness.*—A certificate of airworthiness shall be valid for a period of one year from the date on which the flying machine was passed for the issue of the certificate:

Provided that, in the case of damage to the flying machine such as renders it unsafe for flight, or of failure to carry out the inspection prescribed in these Rules, or of failure to carry out any compulsory modification directed by the Governor General in Council, or of incorporation of any modification which has not been approved by the Governor General in Council, the certificate shall cease to be valid until the flying machine has been repaired or modified as the case may be and inspected and certified as required by these Rules.

56. *Renewal of certificates of airworthiness.*—The Governor General in Council may renew any certificate of airworthiness for such further period (not exceeding one year at a time) as he may think fit, and may for this purpose require the flying machine to be overhauled, inspected and certified in accordance with Rule 57 and in addition may require the flying machine to be inspected by a person authorised in this behalf by the Governor General in Council or tested in flight, or to be so inspected and so tested, and the owner of the aircraft shall give all necessary facilities for such inspection and test.

57. *Periodical overhaul.*—Every flying machine required by these Rules to be provided with a certificate of airworthiness, and every engine of such flying machine shall be periodically overhauled and after every such overhaul, and after the completion of any repairs to or modification of the flying machine or engine, the flying machine shall be inspected and certified in accordance with the provisions of Section E of Schedule III by the appropriate person licensed under Rule 61.

58. *Modifications.*—(1) If at any time the Governor General in Council considers modifications to a flying machine, in respect of which a certificate of airworthiness is in force, to be necessary for safety, he may require such modifications to be carried out as a condition of the certificate of airworthiness remaining in force.

Such modifications may be notified in a general notice to aircraft owners and ground engineers or in a special notice to the owner of a particular aircraft.

(2) If modifications (including changes of equipment or its installation) which affect the safety of the flying machine are carried out in a flying machine in respect of which a certificate of airworthiness is in force, then, until the modifications have been approved by the Governor General in Council, the flying machine shall not fly except in so far as under these Rules it might fly if it had no certificate of airworthiness.

(3) Any such modifications shall be carried out by methods approved by the Governor General in Council and shall be inspected by

the appropriate person licensed under Rule 61, who shall certify the modification in the form and manner laid down in Section F of Schedule III.

59. *Maintenance standards and accessories.*—The Governor General in Council may in respect of any aircraft or class of aircraft which is certified as airworthy under these Rules and in respect of any technical accessories or equipment used in connection with the operation of such aircraft, prescribe conditions for the technical operation, maintenance and use of such aircraft, accessories or equipment.

60. *Daily inspection.*—(1) A public transport flying machine effecting public transport shall not commence any flight unless it has, within the preceding 24 hours, been inspected and certified as safe for flight in accordance with these Rules by the appropriate person licensed under Rule 61 :

Provided that if any such flying machine not carrying passengers for remuneration on a regular scheduled air service is absent from its usual station, whether by reason of delay or otherwise, for a longer period than 24 hours, it may proceed on its journey if, at the time of commencement of a flight, it has not performed more than 12 hours' flying and a period of more than four days has not intervened, since it was last so inspected and certified :

Provided further that no such flying machine shall commence any flight if, since such inspection, it has suffered any damage or revealed any defect which would render the machine unsafe for flight and which could not, in accordance with ordinary aeronautical practice, be remedied by the pilot or crew.

(2) The certificate required by sub-rule (1) shall be given in the form and manner specified in Section D of Schedule III.

(3) The pilot or commander of every flying machine shall before commencing any flight satisfy himself that :—

(a) having regard to the performance of the aircraft, the extent to which it is loaded, and the prevailing conditions, sufficient length of run is available to effect a safe take off and the line of flight in the take off direction is not obstructed, and that

(b) the flying machine is safe for flight according to the circumstances of the flight as laid down in Section D of Schedule III.

61. *Licensing of Ground Engineers*—

(1) For the purpose of Rules 57, 58 and 60 the Governor General in Council may grant licences as Ground Engineers in the following categories to persons who satisfy the requirements as to practical experience, examination and tests laid down in Section F of Schedule III, namely :—

Category A.—Inspection of aircraft before flight.

Category B.—Inspection of aircraft during construction or overhaul.

Category C.—Inspection of aero-engines before flight.

Category D.—Inspection of aero-engines during construction or overhaul.

Category X.—Inspection, construction, installation and repair of aircraft instruments, accessories and equipment; special duties as may be specified in the licence.

- (2) A Ground Engineer's licence shall not be granted to a person who has not attained the age of 21 years.
- (3) Licences shall remain valid, unless cancelled or suspended, for the periods specified therein, subject to a maximum period of twelve months in each case, and may thereafter be renewed by the Governor General in Council. A candidate for the renewal of a licence may be required to undergo further examinations and tests as a condition of the renewal of the licence.
- (4) A Ground Engineer licensed in a particular category shall be competent to deal only with the matters specified in sub-rule (1) against the category in which he is licensed.
- (5) A licence granted under this rule shall specify the type or types of aircraft, aero-engines, instruments, accessories or equipment which the licensee is competent to deal with, and may contain restrictions limiting his competence to deal with any particular class of work, and the Governor General in Council may at any time vary such specifications or restrictions.
- (6) Any licence granted under this rule may be cancelled, suspended or endorsed by the Governor General in Council after investigation where it appears to him that—
 - (a) the holder of such licence has performed work, or granted a certificate in respect of work, which has not been performed in a careful and competent manner, or
 - (b) the holder of such licence has granted a certificate in respect of any matter which he is not licensed to deal with, or
 - (c) it is undesirable for any other reason that the holder of such licence should continue to exercise the functions of a Ground Engineer.
- (7) The Governor General in Council may withhold the grant or renewal of a licence if, for any reason he considers it desirable to do so.

62. *Fees*—

- (1) The following fees shall be payable in respect of the issue or renewal of certificates of airworthiness and Ground Engineers' licences and duplicate certificates and licences, and the inspections, tests and examinations required by this Part—

Certificate of Airworthiness.

- (a) Issue or renewal of Certificate, including such inspections as may be required by the Governor General in Council:—

Aerodynes.

	Rs.
Maximum permissible weight of 2,500 lbs. or less...	50

	Rs.
Maximum permissible weight over 2,500 lbs. but not more than 5,000 lbs. ...	75
Maximum permissible weight over 5,000 lbs. but not more than 10,000 lbs. ...	100
Maximum permissible weight over 10,000 lbs. but not more than 20,000 lbs. ...	200
Maximum permissible weight over 20,000 lbs. ...	300
(b) Issue of certificate without inspection (Rule 50)	10
(c) Issue of duplicate certificate	5
<i>Ground Engineers' Licences.</i>	

<i>For the Licence—</i>	Rs.
Issue, renewal or issue of duplicate licence	5

For each separate technical examination—

When required, on issue, or extension—

(i) One category	10
(ii) Two categories	15
(iii) Each additional category	5
(iv) Additions of types of aircraft, engines, instruments, accessories or equipment to those already endorsed on the licence for each category in which additions are required	5

- (2) When, in view of the candidate's experience and competence, it is decided to dispense with the whole or a part of the technical examination, the fee may be waived or reduced by such amount as the Governor General in Council thinks fit.
- (3) An application for a licence or certificate or for the renewal or extension of a licence or certificate shall be accompanied by a Treasury Receipt for the sum necessary to cover all the fees payable, but when, in any case, the licence or certificate is not issued, renewed or extended, the Governor General in Council may refund to the applicant such proportion of the sum paid as represents the cost of any examination or inspection not carried out or any licence or certificate not issued.

PART VII.—RADIO-TELEGRAPH APPARATUS.

63. *Aircraft for which apparatus is obligatory.*—Every public transport aircraft registered in British India, which is capable, according to its certificate of airworthiness, of carrying ten or more persons including the crew, shall, when used in international air navigation or on a regular air transport service operating in British India, be equipped with radio-telegraph apparatus of a type approved by the Governor General in Council capable of sending and receiving communications by radio-telegraphy or radio-telephony, and installed, bonded and screened in a manner approved by the Governor General in Council.

64. *Suspension of Rules.*—The application of the Rules in this Part may be suspended when owing to the lack of radio-telegraph organisations available for air traffic in a particular region the employment of

radio-telegraph apparatus on board aircraft would serve no useful purpose.

PART VIII.—AIR-ROUTE BEACONS, AERODROMES LIGHTS
AND FALSE LIGHTS.

65. *Air-route beacons and aerodrome lights.*—(1) No air-route beacon or aerodrome light shall be established or maintained within British India, nor shall the character of the light exhibited therefrom be altered, except with the approval in writing of the Governor General in Council, and subject to such conditions as he may prescribe.

(2) No person shall wilfully or negligently injure or interfere with any air-route beacon or aerodrome light, established or maintained with the approval of the Governor General in Council, or any light exhibited therefrom.

66. *False lights.*—(1) Whenever in British India any light is exhibited—

(a) in the neighbourhood of an aerodrome or an air-route beacon so as to be liable to be mistaken for an aerodrome light or an air-route beacon; or

(b) which by reason of its liability to be mistaken for an aerodrome light or an air-route beacon is calculated to endanger the safety of aircraft; or

(c) which, being in the neighbourhood of an aerodrome, is liable by reason of its glare to endanger the safety of aircraft arriving at or departing from the aerodrome,

the Governor General in Council may serve a notice upon the owner or person in possession of the place where the light is exhibited or upon the person having charge of the light, directing that owner or person, within a reasonable time to be specified in the notice, to take effectual means for extinguishing or for effectually screening the light and for preventing for the future the exhibition of any similar light.

(2) The notice may be served either personally or by post, or by affixing the same in some conspicuous place near to the light to which the notice relates.

(3) An owner or person on whom a notice under sub-rule (1) has been served shall, in the absence of reasonable cause, the burden of proving which shall be upon him, comply with the directions contained in the notice.

(4) If any owner or person on whom a notice under this rule is served, neglects for a period of seven days to extinguish or effectually to screen the light mentioned in the notice, the Governor General in Council may enter upon the place where the light is and forthwith extinguish the same, doing no unnecessary damage.

PART IX.—LOG BOOKS.

67. (1) The following log books shall be kept in respect of aircraft registered in British India, namely:—

(a) for every aircraft an aircraft log book and an engine log book and where more than one engine is fitted, a separate log book for each engine;

(b) in addition, for every public transport aircraft (except where such aircraft does not leave the vicinity of its starting place and returns without landing elsewhere to its starting place) and for every aircraft engaged in international navigation, a journey log book.

(2) The log books shall be kept up-to-date in such manner as the Governor General in Council may direct.

(3) The journey log book shall be issued by the Governor General in Council; other log books shall be in the form required by the Governor General in Council.

(4) The log books shall be preserved for two years from the date of the last entry therein.

(5) No person shall destroy, mutilate, alter or render illegible any log book or any entry made therein, or wilfully make or procure or assist in the making of any false or fraudulent entry in or omission from any log book.

PART X.—INVESTIGATION OF ACCIDENTS.

68. In this Part the expression "serious structural damage" in relation to an aircraft means:—

- (i) the telescoping or breaking apart of the fuselage; or
- (ii) the breaking of a main spar; or
- (iii) the breaking of any part of the controls; or
- (iv) damage by fire to any part of the aircraft.

69. *Notification of accidents.*—(1) When an accident, in which any aircraft is involved, occurs in or over British India, and such accident involves death or personal injury to any person, whether carried in the aircraft or not, or serious structural damage to the aircraft, or is suspected to have been caused or contributed to by the failure in the air of any part of the aircraft, the pilot, or, if the pilot is incapacitated by injury, the owner or, if the owner is not present or is incapacitated by injury, the hirer of the aircraft shall—

- (a) send notice thereof by telegram to the Director of Civil Aviation in India, and
- (b) give information to the District Magistrate and the Officer in charge of the nearest Police Station.

(2) The notice and information shall be sent as soon as possible and by the best available means and in any case within twenty-four hours after the occurrence of the accident.

(3) The notice to the Director of Civil Aviation in India shall contain the following information:—

- (i) the nationality and the registration marks of the aircraft;
 - (ii) the name of the owner and hirer (if any) of the aircraft;
 - (iii) the name of the pilot of the aircraft;
 - (iv) the place where the accident occurred;
 - (v) the date and time when the accident occurred;
 - (vi) the nature of the accident;
 - (vii) a brief statement of the extent of damage to the aircraft;
- and

(viii) whether death or personal injury was caused by the accident, and, if so, to whom.

70 *Report on accidents.*—The pilot or owner of an aircraft which has been involved in an accident, whether notifiable under Rule 69 or not, shall, if required by the Director of Civil Aviation in India, submit to the Director, a written report on such accident in such form as he may prescribe.

71 *Removal of wreckage.*—(1) In the case of an accident which is notifiable under Rule 69 and which involves serious structural damage, or in any other case in which the Director of Civil Aviation in India gives notice to the owner or other person in charge of the aircraft to this effect, the aircraft shall not, except under the authority of the Director of Civil Aviation in India, be removed or otherwise interfered with:

Provided that, subject to compliance with the provisions of Rule 61 of the Indian Aircraft Rules, 1920, in so far as they may be applicable:—

- (i) if the aircraft is wrecked on water, the aircraft or any parts or contents thereof may be removed to such extent as may be necessary for bringing it or them to a place of safety;
- (ii) the aircraft or any parts or contents thereof may be removed or interfered with so far as may be necessary for the purpose of extricating persons or animals, preventing the destruction of the aircraft or its contents by fire or other cause or preventing any danger or obstruction to the public; and
- (iii) goods, mails or passengers' baggage may be removed from the aircraft under the supervision of the pilot, a member of the crew, an official of the operating company, an officer of police, a Magistrate, or an officer of the Civil Aviation Directorate, and, in the absence of any such person, mails may be removed under the supervision of an officer of the Posts and Telegraphs Department, and passengers' baggage by the owner or owners thereof.

(2) The Director of Civil Aviation in India may authorise any person, so far as may be necessary for the purpose of any investigation under these Rules, to take measures for the preservation of any aircraft involved in an accident, and such person may thereupon have access to, examine, or otherwise deal with the aircraft;

(3) The owner of the aircraft or his nominated representative shall have the right to be present during any examination or other action taken under sub-rules (1) and (2) provided that the Director of Civil Aviation shall not be bound to postpone any action which he may consider necessary under this rule by reason of the absence of the owner or his representative.

72 *Inspector's Investigation.*—(1) The Director of Civil Aviation in India may order the investigation of any accident, whether notifiable under rule 69 or not and may by general or special order appoint any person (hereinafter referred to as an Inspector of Accidents) for the purpose of carrying out such investigation.

(2) The investigation shall be conducted in such manner that if a charge is made or is likely to be made against any person, that person shall have an opportunity of being present and of making any statement, or giving any evidence and producing witnesses on his behalf.

(3) The Inspector of Accidents shall make a report to the Director of Civil Aviation in India stating all relevant facts with regard to the accident and his findings with regard to the causes of the accident and adding any recommendations which he may think fit to make with a view to the avoidance of similar accidents in future.

73. *Powers of Inspector.*—For the purpose of such investigation an Inspector of Accidents shall have power :—

- (a) by summons under his hand to require the attendance of any person whom he thinks fit to call before him and examine for such purpose and to require answers or returns to any inquiries he thinks fit to make;
- (b) to require any such person to make and sign a declaration of the truth of the statements made by him in his examination;
- (c) to require and enforce the production of all books, papers, documents and material objects which he considers important for such purpose;
- (d) to have access to and examine any aircraft concerned in the accident, the place where the accident occurred, or any other place the entry upon and examination of which appears to the Inspector requisite for the purposes of the investigation.

74. *Inspector's fee.*—When a person other than an officer of Government is appointed to investigate an accident, he may be granted such fee and expenses as may be determined by the Governor General in Council.

75. *Formal Investigation.*—Where it appears to the Governor General in Council that it is expedient to hold a formal investigation of an accident, he may whether investigation has been made under Rule 62 or not, by order direct a formal investigation to be held; and with respect to any such formal investigation the following provisions shall have effect:—

- (1) The Governor General in Council shall appoint a competent person, in these rules referred to as "the Court," to hold the investigation, and may appoint one or more persons possessing legal, aeronautical, engineering, or other special knowledge to act as assessors, and may direct that the Court and the assessors shall receive such remuneration as he may determine.
- (2) The Court shall hold the investigation in open court in such manner and under such conditions as the Court may think most effectual for ascertaining the causes and circumstances of the accident and enabling the Court to make the report hereinafter mentioned.
- (3) (i) The Court shall have, for the purpose of the investigation, all the powers of a Civil Court under the Code of

Civil Procedure, 1908, and without prejudice to those powers the Court may—

- (a) enter and inspect, or authorise any person to enter and inspect, any place or building, the entry or inspection whereof appears to the Court requisite for the purposes of the investigation; and
- (b) enforce the attendance of witnesses and compel the production of documents and material objects; and every person required by the Court to furnish any information shall be deemed to be legally bound to do so within the meaning of Section 176 of the Indian Penal Code.

(ii) The assessors shall have the same powers of entry and inspection as the Court.

(4) The investigation shall be conducted in such manner that, if a charge is made or likely to be made against any person, that person shall have an opportunity of being present and of making any statement or giving any evidence and producing witnesses on his behalf.

(5) Every person attending as a witness before the Court shall be allowed such expenses as the Court may consider reasonable:

Provided that, in the case of the owner or hirer of any aircraft concerned in the accident and of any persons in his employment or of any other person concerned in the accident, any such expenses may be disallowed if the Court, in its discretion, so directs.

(6) The Court shall make a report to the Governor General in Council stating its findings as to the causes of the accident and the circumstances thereof, and adding any observations and recommendations which the Court thinks fit to make with a view to the preservation of life and the avoidance of similar accidents in future, including a recommendation for the cancellation, suspension or endorsement of any licence or certificate issued under these Rules.

(7) The assessors (if any) shall either sign the report, with or without reservations, or state in writing their dissent therefrom and their reasons for such dissent, and such reservations or dissent and reasons (if any) shall be forwarded to the Governor General in Council with the report. The Governor General in Council may cause any such report and reservations or dissent and reasons (if any) to be made public, wholly or in part, in such manner as he thinks fit.

76. *Obstructions of Proceedings.*—(1) A person shall not obstruct or impede the Court or an Inspector of Accidents or an assessor or any person acting in the exercise of any powers or duties under the rules in this Part.

(2) A person shall not without reasonable excuse (the burden of proving which shall lie on him) fail to comply with any summons or requisition of a Court or an Inspector of Accidents holding an investigation under the rules in this Part.

77. *Saving.*—Nothing in this Part shall limit the power of the Governor General in Council with regard to the cancellation, suspension or endorsement of any licence or certificate issued under these Rules.

PART XI—AERODROMES.

78. *Government Aerodromes.*—A Government aerodrome shall not be open to use by any member of the public, save to such extent if any, and subject to such conditions as the Governor General in Council may determine.

79. *Places other than Government Aerodromes.*—A place in British India other than a Government aerodrome shall not be used as a regular place of landing and departure by a scheduled air transport service or for a series of landings and departures by any aircraft carrying passengers for hire or reward unless it has been licensed, for the purpose, or save in accordance with the conditions, if any, of such licence.

80. *Licensed Aerodromes.*—An aerodrome shall be licensed by the Governor General in Council in one of the following categories, namely :—

(a) for public use;

(b) for private use; that is to say, for use by the licensee and by individuals specifically authorised by the licensee.

81. *Public aerodromes.*—Every aerodrome which is licensed for public use or which is open to use by aircraft registered in India upon payment of charges shall, to the same extent and upon the same conditions, be open to use by aircraft possessing the nationality of a contracting State. Every such aerodrome shall at all reasonable times be open to use by any aircraft in the service of His Majesty.

82. *Tariff Charges.*—At every aerodrome referred to in rule 81, there shall be exhibited in a conspicuous place a single tariff of charges, including charges for landing and length of stay, which shall not exceed the charges specified in, and shall be leviable in accordance with the provisions contained in, Section B of Schedule V, and such tariff shall be applicable alike to all aircraft whether registered in India or in any contracting State.

83. *Qualification of licensee.*—A licence for an aerodrome shall not be granted to any person or corporation other than—

(a) a British subject or person under His Majesty's protection, or

(b) a company or corporation registered and having its principal place of business in His Majesty's Dominions.

84. *Period of validity of licence.*—An aerodrome licence may be granted for any period not exceeding twelve months, and on each occasion of renewal may be renewed for any period not exceeding twelve months.

85. *Classification of Aerodromes.*—An aerodrome may be licensed for all types of aircraft or for certain specified types or classes of aircraft and the licence may specify the conditions on which the aerodrome may be used.

86. *Conditions governing the grant of a licence.*—(1) A licence shall not be granted in respect of any place which does not satisfy the requirements specified in Part A of Schedule V.

(2) While a licence is in force no alterations to the landing area or to the buildings or other structures on the aerodrome which may affect the safety of aircraft shall be undertaken save with the previous approval of the Governor General in Council. Application for such approval shall be addressed to the Director of Civil Aviation in India and shall be accompanied by full particulars with plans of any such alterations including alterations to surrounding obstructions which may affect the safety of aircraft.

(3) The necessary approval may be granted or withheld and if granted may be granted subject to such conditions (including conditions involving a revision of the original conditions of licence) as the Governor General in Council may think fit.

(4) If any alteration of the nature referred to in sub-rule (2) is undertaken without the previous approval of the Governor General in Council the licence may be cancelled.

(5) The licensee shall maintain the aerodrome in a fit state for use by aircraft and adequately marked to the satisfaction of the Governor General in Council during the whole period of the currency of the licence where this exceeds a period of three months and shall, if the aerodrome becomes unserviceable, immediately notify the Director of Civil Aviation in India by telegraph.

87. *Fees.*—The fees chargeable for the grant or renewal of a licence for an aerodrome shall be—

	Rs.
(1) When the licence is granted or renewed for a period not exceeding three months ...	15
(2) When the licence is granted or renewed for a period exceeding three months but not exceeding six months ...	20
(5) When the licence is granted or renewed for a period exceeding 6 months but not exceeding 12 months ...	30

Provided that if, in the opinion of the Governor General in Council, it is necessary or expedient before the grant or renewal of the licence, for the aerodrome in question to be inspected by an officer of Government or other person authorised by the Director of Civil Aviation in India, an additional fee of Rs. 30 shall be chargeable for the inspection, and the applicant shall also be required to pay the travelling expenses of the Inspecting Officer.

PART XII.—RULES OF THE AIR.

SECTION I.—LIGHTS AND VISUAL SIGNALS TO BE DISPLAYED BY AIRCRAFT AND SOUND SIGNALS.

A.—General.

88. *Obligation to display the required lights.*—The rules concerning lights to be displayed by aircraft shall be complied with all weathers from sunset to sunrise and during such time no other lights which may be mistaken for the prescribed lights shall be exhibited. The said lights shall not be dazzling.

89. *Angular limits of lights.*—The angular limits of the lights referred to in this Part shall be determined when the aircraft is in its

normal position for flying on a rectilinear horizontal course and as shewn diagrammatically in figure 1 in Schedule IV.

90. *Failure of lights, etc.*—(1) In the event of the failure of any light which is required by these Rules to be displayed by aircraft in flight, the aircraft concerned shall, if the light cannot immediately be repaired or replaced in flight, land as soon as it can do so without danger.

(2) Where, owing to the difficulty of producing lamps to meet the requirements of these Rules as regards sector lights, an overlap of those lights is unavoidable, the overlap shall be as small as possible; there shall be no sector in which no light is visible.

91. *Savings.*—Nothing in these Rules shall interfere with the operation of any special rules made by the Government of any State with respect to the additional signal or station lights for military aircraft, aircraft exclusively employed in State services or for aircraft in group formation, or with the exhibition of recognition signals adopted by owners of aircraft which have been authorized by their respective Governments and duly published.

B.—Lights and visual signals to be displayed by aircraft.

Flying machines.

92. *In the air or on land aerodromes.*—(1) Every flying machine in the air or on the landing area of a land aerodrome shall display the following lights, that is to say:—

- (a) on the right side, a green light, fixed so as to show an unbroken light, visible at a distance of at least 5 miles, throughout a dihedral angle of 110° formed by two vertical planes, of which one is parallel to the plane of symmetry and directed dead ahead, and the other is directed to the right;
- (b) on the left side, a red light, fixed so as to show an unbroken light, visible at a distance of at least 5 miles, throughout a dihedral angle of 110° formed by two vertical planes, of which one is parallel to the plane of symmetry and directed dead ahead, and the other is directed to the left;
- (c) at the rear, a white light, fixed so as to show astern an unbroken light, visible at a distance of at least 3 miles; throughout a dihedral angle of 140° formed by two vertical planes bisected by the plane of symmetry.

(2) In a case where, in order to comply with the provisions of sub-rule (1), a single light has to be replaced by several lights, the field of visibility of each of these lights shall be so limited that only one can be seen at a time.

(3) In the case of a flying machine with a maximum span of less than 65 feet, the lights required by this rule may be combined in one or more lamps, placed centrally, provided that the requirements of sub-rules (1) and (2) as to colour and visibility are complied with.

93. *Under way on the surface of the water.*—Every flying machine under way on the surface of the water shall display lights in accordance with the following provisions:—

- (1) If it is under control and is not being towed, it shall display the lights required by rule 92, and in addition, forward, a white light fixed so as to show forward an unbroken light

visible, at a distance of at least 3 miles, throughout a dihedral angle of 220° formed by two vertical planes and bisected by the plane of symmetry.

(2) If it is being towed, it shall display the lights required by rule 92.

(3) If it is not under control, it shall display two red lights placed where they can best be seen, one vertically over the other, not less than 3 feet apart, and both being visible, so far as practicable, all round the horizon at a distance of at least 2 miles, and, in addition—

(a) if making way, it shall display the lights required by rule 92; or

(b) if not making way, it shall display the light required by clause (c) of sub-rule (1) of rule 92.

(4) If it is towing another aerodyne, it shall display the lights specified in clause (1) and in addition, forward, two white lights placed where they can best be seen, one vertically over the other, not less than 6 feet apart, and visible at a distance of at least 3 miles in a dihedral angle of 220° formed by two vertical planes and bisected by the plane of symmetry.

94. *At anchor or moored on the surface of the water*—Every flying machine whether at anchor or moored on the surface of the water shall display lights in accordance with the following provisions, namely:—

(1) In every case, it shall display forward centrally where it can best be seen, a white light, visible all round the horizon at a distance of at least 1 mile.

(2) In a case where the length of the flying machine is 150 feet or upwards, it shall display, in addition to any other light required by this rule, a white light at or near its stern at a lower height than the forward light mentioned in clause (1), and visible all round the horizon at a distance of at least 1 mile.

(3) In a case where the maximum span of the flying machine is 150 feet or upwards, it shall display, in addition to any other light required by this rule, a white light on each side placed in such a manner as to demarcate the maximum lateral dimension of the flying machine and visible, so far as practicable, all round the horizon at a distance of at least 1 mile.

Gliders.

95. In all cases in which flying machines are required by these rules to display lights, a glider shall display a red light visible, so far as practicable, in all directions.

Balloons and Kites.

96. *Free Balloons.*—A free balloon shall display a red light placed not less than 15 or more than 30 feet below the basket and visible, so far as practicable, in all directions at a distance of at least 2 miles.

97. *Captive Balloons and Kites.*—In the case of a captive balloon

or kite, lights shall be displayed in accordance with the following provisions, namely:—

- (1) when flown at an altitude exceeding 180 feet above the ground, or at any altitude if it is less than 3 miles from an aerodrome or from a recognised air route, the balloon or kite shall display a white light placed 12 feet vertically above a red light, these lights being visible so far as practicable in all directions at a distance of at least 2 miles, the upper white light being placed not less than 15 or more than 30 feet below the basket, or, if there is no basket, below the lowest part of the balloon or kite;
- (2) in addition, from the mooring cable of the balloon or kite there shall be displayed at intervals of 1,000 feet measured from the said group of two lights, similar groups of two lights, one white and one red and if the lowest group of lights is obscured by clouds, an additional group shall be displayed below the clouds base;
- (3) in addition, the position of the object to which the balloon or kite is moored on the ground shall be marked by a group of three flashing lights, arranged on a horizontal plane at the apexes of a triangle approximately equilateral and measuring at least 75 feet on each side; the side of this triangle, perpendicular to the horizontal projection of the cable, shall be delimited by two red lights, the third light shall be a green light placed opposite the direction of the cable.

98. *Day markings for captive balloons.*—By day, the mooring cable of a captive balloon shall have attached to it at intervals of not more than 600 feet measured from the basket (or, if there is no basket, from the lowest part of the balloon) tubular streamers, not less than 8 inches in diameter and 6 feet in length, and marked with alternate bands of white and red 18 inches in width.

99. *Day markings for kites.*—By day, the mooring cable of a kite shall be marked, either in the manner required by rule 98 in the case of a captive balloon, or by streamers of stout paper attached to the cable at intervals of 300 feet measured from the lowest part of the kite, such streamers being not less than 30 inches in length and one foot in width in their widest part and marked with alternate bands of white and red 4 inches wide.

Airships.

100. *Under way—*

- (1) Except as provided in rule 101, an airship when under way shall display the following lights, namely:

- (a) forward, a white light fixed so as to show forward an unbroken light visible at a distance of at least 5 miles and throughout a dihedral angle of 220° formed by two vertical planes and bisected by the plane of symmetry;
- (b) on the right side, a green light fixed so as to show an unbroken light visible at a distance of at least 5 miles and throughout a dihedral angle of 110° formed by two

vertical planes, of which one is parallel to the plane of symmetry and directed dead ahead, and the other is directed to the right;

(c) on the left side, a red light fixed so as to show an unbroken light visible at a distance of at least 5 miles and throughout a dihedral angle of 110° formed by two vertical planes, of which one is parallel to the plane of symmetry and directed dead ahead and the other is directed to the left;

(d) at the rear, a white light fixed so as to show astern an unbroken light visible at a distance of at least 3 miles and throughout a dihedral angle of 140° formed by two vertical planes and bisected by the plane of symmetry

(2) In a case where, in order to comply with the provisions of sub-rule (1), a single light has to be replaced by several lights, the field of visibility of each of those lights shall be so limited that only one can be seen at a time.

101. *Not under control*.—(1) An airship which is under way and which is not under control, or which has voluntarily stopped its engines, or which is being towed, shall display the following lights, namely:—

(a) the forward and rear lights required by clauses (a) and (d) of sub-rule (1) of rule 100;

(b) in addition, below the airship, two red lights, one placed vertically below the other 12 feet apart, the upper light being 25 feet below the control car, and both being visible so far as practicable in all directions at a distance of not less than two miles;

(c) in addition, if making way but not otherwise, the side lights required by clauses (b) and (c) of sub-rule (1) of rule 100.

(2) By day, an airship in the circumstances mentioned in sub-rule (1) of this rule shall display two black balls or shapes, each at least 2 feet in diameter, one placed vertically below the other 12 feet apart, the upper one being 24 feet below the control car, and both being visible so far as practicable in all directions.

Where necessary in order to comply with this requirement, the said group of two black balls or shapes may be duplicated.

102. *Moored*.—(1) An airship when moored to a mooring mast shall display at or near the yard a white light visible, so far as practicable, in all directions at a distance of at least 3 miles.

(2) An airship, when moored to the ground or the surface of the water by a cable, shall display, forward, the white light required by clause (a) of sub-rule (1) of rule 100, and at the rear, the white light required by clause (d) of that sub-rule, and in addition the airship and its mooring cable shall be lighted or marked in accordance with such of the provisions of rules 97 and 98 as are applicable in the case of a captive balloon.

(3) An airship while picking up its moorings, although considered as being under way and not being under control, shall however display only the lights specified in rule 100 until it is finally made fast.

C.—*Sound Signals.*

103. *Fog, mist, etc.*—In fog, mist, falling snow or heavy rain-storm, whether by day or night, an aircraft on the water shall make the following sound signals, namely:—

- (a) If not anchored or moored, a sound at intervals of not more than two minutes, consisting of two blasts of about five seconds' duration with an interval of about one second between them.
- (b) If at anchor or moored, the rapid ringing of an efficient bell or gong for about five seconds at intervals of not more than one minute.

SECTION II.

GROUND MARKING AND SIGNALLING.

A. GROUND MARKINGS, LIGHTS AND SIGNALS ON AND IN THE VICINITY OF AERODROMES OPEN TO PUBLIC USE.

104. *Ground markings.*—At every land aerodrome open to public use, the boundaries of the landing area shall, by means of suitable markings, be rendered clearly visible both to aircraft in the air and to aircraft manoeuvring on the landing area. In addition, a circle marking may be placed on the landing area. All obstructions existing on a landing area shall be clearly marked. In case part of the marked landing area should become unfit for use, this part shall be delimited by clearly visible markings or flags, and may, in addition, be indicated by one or more clearly visible crosses.

105. *Ground signals.*—(1) At every aerodrome open to public use—

- (a) the direction of the wind at the landing area shall be clearly indicated by one or more of the recognised methods, *e.g.*, conical streamers, smudge fire, etc.;
- (b) if there is a landing T, it shall be used to indicate the compulsory direction for landing and taking-off, even should such direction not correspond to the direction of the wind. Normally, the T shall be so placed that the long arm lies along the direction of the wind, with the cross arm set at that end of the long arm from which the wind is blowing. In the event of there being no wind or a light irregular wind, the T shall be fixed in the direction in which the landing or departure is to be made, and the fact that it is fixed shall be signalled by the presence of a ball, mounted on a mast on the signal area and clearly visible both to aircraft in flight and to those manoeuvring on the landing area.

(2) When, by way of exception, at certain aerodromes, the landing area is regarded as divided into two approximately equal zones, one for departure and the other for landing, as provided for in rule 126, this special arrangement must be indicated by a full star of five points (constituted by a regular non-convex pentagon which could be inscribed

in a circle of not less than forty-five feet diameter) as shown in figure 2 in Schedule IV.

(3) When under rule 118 the special rules for air traffic prescribed in Section V are temporarily suspended, wholly or partially, in respect of a specified aerodrome, such suspension shall be indicated by a red square panel, each side of which measures at least ten feet, placed horizontally as shown in figure 3 in Schedule IV.

(4) If an order issued under rule 118 prescribes among other things that circuits outside the landing area and those for taking off and landing, which are referred to in clause (b) of rule 120 and rule 124, are to be right-handed, the red square panel prescribed in sub-rule (3) of this rule, shall, along two of its sides, be bordered by a red rectangular panel at least three feet in width, separated from the central panel by at least three feet. At the extremity of one of the rectangular panels shall be placed a red triangle so as to indicate that the direction of the circuit is right-handed as shown in figure 4 in Schedule IV. If, however, the only object of the order is that circuits should be right-handed, the red square panel shall not be displayed.

(5) When special circumstances call for a prohibition to land liable to be prolonged, use shall be made of a red square panel, placed horizontally, each side of which measures at least ten feet and the diagonals of which are covered by yellow strips at least two feet in width, arranged in the form of an X as shown in figure 5 in Schedule IV.

(6) When the bad state of the landing area or any other reason calls for the observance of certain precautions in landing, use may be made of a red square panel, placed horizontally, each side of which measures at least ten feet and one of the diagonals of which is covered by a yellow strip at least two feet in width as shown in figure 6 in Schedule IV.

(7) When a landing by means of a radio-electric guide is taking place the fact may be signalled by hoisting on a mast a yellow triangular equilateral pyramid, each side of which measures at least six feet as shown in figure 7 in Schedule IV.

(8) The signals referred to in the foregoing sub-rules shall, whenever possible, be displayed in a special part of the aerodrome selected as a signal area; by way of exception, the wind indicators and the landing T referred to in sub-rule (1) of this rule may be located elsewhere.

(9) During periods of poor visibility, the lights existing for night lighting shall be operated by day, whenever possible and in so far as necessary.

106. *Ground lights.*—(1) At every aerodrome open to public use and used for night flying, the following provisions shall apply during the working hours of the night service, namely:—

(a) *Dangerous lights.*—No lights shall be exhibited at or in the neighbourhood of an aerodrome which may endanger the safety of aircraft, whether by reason of glare, or by causing confusion with or preventing clear visual reception of the lights or signals prescribed in these rules.

(b) *Aerodrome beacon.*—The position of the aerodrome may be indicated by a luminous beacon.

(2) At every land aerodrome open to public use and used for

night-flying, the following provisions shall apply during the working hours of the night service, namely:—

(a) *Lighting of obstructions.*—Fixed red lights shall be exhibited—

- (i) on all obstructions within the landing area which constitute a danger to aircraft in motion on the landing area.
- (ii) as far as possible, on all obstructions within 1,000 yards of the boundary of the landing area and constituting a danger to aircraft approaching or leaving the aerodrome in a normal manner. In case it should be impossible to exhibit fixed red lights on such obstructions, their horizontal projection and the centre of the obstructions shall, as far as possible, be clearly indicated by synchronised red flashing or occulting lights, placed on a level with or near to the ground.

(b) *Lighting of landing T and of wind indicators.*—The landing T, if used, and at least one of the wind indicators shall be illuminated with fixed lighting, preferably white.

(c) *Lighting of signals.*—The signals displayed in the signal area shall be suitably illuminated.

(d) *Lighting of landing area.*—

- (i) The landing area or the part thereof on which landings should be made shall be illuminated by a floodlight or floodlight system during landing manoeuvres:
- (ii) In default, one of the following methods may be used:

First method: A line of lights spaced 150 feet apart shall be laid out on the ground, consisting of a central section of six white lights to indicate that landings should be made on the adjacent portion of the landing area and on either side of this line, with at least two green lights at one end and at least two red lights at the other end to indicate that landings should be made from the direction of the green lights towards the red lights;

Second method: Lights shall be laid out on the ground in the form of a T, the long arm of which shall be composed of at least four lights in a line not less than 250 yards in length. The light at the foot of the T shall indicate the place where the aerodyne should first make contact with the ground and the cross arm of the T shall indicate the place where it should finish its run. Landings may be made on either side of the long arm of the T but always paralld to that arm; in the event, however, of the area situated on either side of the long arm becoming obstructed, the light indicating the cross arm on that side shall be removed and landing shall be effected on the opposite side.

The direction of landing and take-off will be given by the two alternative methods referred to above; the landing T shall not, therefore, be used.

(e) *Approach lighting.*—The most favourable sectors of approach to the landing area may be indicated by green lights.

(f) *Boundary lighting*—The boundary of the landing area shall be marked by fixed yellow-orange lights, normally laid out 300 feet apart:

Provided that—

- (i) when there are obstructions on the boundary of the landing area, the lights serving to mark such obstructions may take the place of boundary lights;
- (ii) when the boundary lights are in the form of strips, their colour may be red;
- (iii) when local conditions render unavoidable the use of gas boundary lights, they may be given an intermittent character;
- (iv) when the boundary of the landing area cannot be marked, only the extremities of such landing area between which aircraft may move without danger shall be indicated by fixed yellow-orange lights.

(3) At every water aerodrome open to public use and used for night flying, the provisions of sub-rule (2) shall equally apply, except in cases of obvious impossibility.

B. DISTRESS, URGENCY AND SAFETY SIGNALS.

107. (1) *General*.—The following general provisions shall apply to all distress, urgency and safety signals, namely:—

- (a) the signals referred to in this rule may be transmitted only with the authorisation of the commander or person responsible for the aircraft;
- (b) when these signals are sent by radio-telegraphy or radiotelephony, the group or spoken expression shall be sent three times and followed by the group DE and the call sign, also sent three times, of the station which sends it. In the case of "safety" messages, the frequency to be employed is that for "distress" messages.

(2) *Distress Signals*.—When an aircraft is threatened by grave and imminent danger and requests immediate assistance, the following signals shall be used or displayed, either together or separately, before the sending of a message, namely:—

- (a) by radiotelegraphy—
the signal [See Note (1)].
- (b) by radiotelephony—
the spoken expression "MAYDAY" (corresponding to the French pronunciation of the expression "m'aider").
- (c) by visual signalling—
 - (i) the signal with signalling apparatus;
 - (ii) a succession of red pyrotechnical lights fired at short intervals;
 - (iii) the two-flag signal corresponding to the letters NC of the International Code of Signals [See Note (2)];
 - (iv) the distant signal, consisting of a square flag having either above or below it, a ball or anything resembling a ball [See Note (2)].

(d) by sound signalling—

- (i) the signal with any sound apparatus;
- (ii) a continuous sounding with any sound apparatus [See Note (2)].

Note (1).—When the signal specified in clause (a) above is sent by radio-telegraphy on 500 kc/s (600 m.), it shall, when possible, in order to be received by automatic maritime apparatus, be followed by the automatic alarm signal consisting of a series of twelve dashes of four seconds each, separated by an interval of one second.

Note (2).—The signals specified in (iii) and (iv) of clause (c) and in (ii) of clause (d) above are normally for use by seaplanes on the surface of the water, but they may also be used by aircraft in the air.

(3) *Urgency Signals*—(a) When an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance, the following signals shall be used, either together or separately, before the sending of a message, namely:—

(i) by radiotelegraphy—

the group PAN, the letters of which must be well separated so that the signals A N may not be transformed into one signal P;

(ii) by radiotelephony—

the spoken expression PAN (corresponding to the French pronunciation of the word “panne”);

in cases where, owing to the rapidity of the manoeuvres to be executed, the aircraft is unable to transmit the intended message by radiotelegraphy or radiotelephony, the signal PAN not followed by a message retains this meaning;

(iii) by visual signalling—

by day: a succession of white pyrotechnical lights;

by night: a succession of white pyrotechnical lights, or a succession of short and intermittent flashes with the navigation lights.

(b) When an aircraft has a very urgent message to transmit concerning its own safety, or that of an aircraft, ship or other vehicle, or the safety of any person on board or within sight, the following signals shall be used, either together or separately, before the sending of the message. As a general rule they are addressed to a specific authority.

(i) by radiotelegraphy—

the group XXX;

the letters of each group and the successive groups shall be clearly separated from each other;

(ii) by visual signalling—

either a succession of green pyrotechnical lights;

or a succession of green flashes with signalling apparatus.

(4) *Safety Signals*.—When an aircraft is about to transmit a message concerning the safety of navigation or giving important

meteorological warnings, the following signals shall be used, either together or separately, before the sending of a message, namely :—

(a) by radiotelegraphy—

the group T T T;

the letters of each group and the successive groups shall be clearly separated from each other.

(b) by radiotelephony—

the French word "SECURITE" (to which correspond in English pronunciation the syllabus SAY-CURE-EAY).

(c) By visual signalling—

International visual signalling procedure, by signalling apparatus or flags.

C. OTHER SIGNALS TO OR FROM AIRCRAFT.

108. *At aerodromes open to public use—*

(1) By day and by night, when there is an officer controlling the traffic, he shall, except as permitted by sub-rule (2) of this rule, use the following visual signals, namely :—

(a) to authorise movement on the landing area, but excluding authorisation to take-off, he shall direct at the aircraft an intermittent white luminous beam;

(b) to authorise taking-off, he shall direct at the aircraft a continuous white luminous beam;

(c) to prohibit taking-off or any movement on the landing area, he shall direct at the aircraft an intermittent red luminous beam.

The signals in this sub-rule may be preceded by the last three letters of the registration group of the aircraft to which the signal is addressed; these three letters shall be sent in the International Morse Code, by using a luminous beam of the same colour as the signal which is to be sent.

(2) By day, when there is on the landing area an officer controlling the traffic, he may use the following signals, namely :—

(a) to authorise movement on the landing area, but excluding authorisation to take-off, he shall wave a small white flag in the direction to be followed;

(b) to authorise taking-off, he shall lower a small white flag in the direction of taking-off;

(c) to prohibit taking-off or movement towards the taking-off point, he shall raise a small red flag;

(d) to prohibit landing, he shall wave a small red flag vertically above his head.

(3) An aircraft wishing to land at night, without being compelled to do so, on an aerodrome having a ground control, shall, before landing, ask permission by a signal made either by radiotelegraphy or radiotelephony or by means of a lamp or a projector, the use of the navigation lights for this purpose not being permissible.

The visual signal, sent by International Morse Code, shall be composed of the last three letters of the registration group of the aircraft; the signal shall be repeated for as long as may be necessary.

The reply will be given from the ground to the aircraft either by radiotelegraphy or radiotelephony or by visual signal, it being understood that when permission has been asked by visual signal the reply shall always be by visual signal. The visual signal shall consist of a repetition of the same three-letter sign made with the signalling lights of the aerodrome.

These signalling lights shall be constituted either by a group of lights arranged on a horizontal plane at the apexes of an equilateral triangle, each side of which measures from one to three yards, or by a luminous beam directed at the aircraft.

The colour green shall be used to give permission to land and the colour red to prohibit landing.

109. *Signals for aircraft not to land.*—(1) At every aerodrome, the firing of a red pyrotechnical light or the display of a red flare from the ground, whether by day or by night and notwithstanding any previous permission, shall be taken as an instruction to aircraft in flight that they are not to land for the moment and to aircraft manoeuvring on the landing area that they are to stop moving.

(2) At aerodromes provided with the triangular device provided for in sub-rule (3) of rule 108, the emission by such device of intermittent red lights shall, whether by day or by night and notwithstanding any previous permission, instruct aircraft in flight that they are not to land for the moment.

110. *Signals for aircraft to land.*—To require an aircraft to land, the following signals shall be used, namely:—

- (a) by day: a series of projectiles discharged at intervals of ten seconds, each showing on bursting black smoke;
- (b) by night: a series of projectiles discharged at intervals of ten seconds, showing on bursting white lights or stars.

In addition, if it is necessary to distinguish amongst several the aircraft which is to land, an intermittent white luminous beam shall be directed at that aircraft.

Provided that, when the authority who desires to give the order to land is able to establish a radioelectric communication with the aircraft, this order may be given by using the means of communication established.

111. *Warning signal for prohibited areas.*—To warn an aircraft that it is in vicinity of a prohibited area and should change its course, the following signals shall be used, namely:—

- (a) by day: a series of projectiles discharged at intervals of ten seconds, each showing on bursting orange smoke;
- (b) by night: a series of projectiles discharged at intervals of ten seconds, showing on bursting orange lights or stars.

Provided that, when the authority who desires to prescribe the change of course referred to in this rule is able to establish a

radio-electric communication with the aircraft, this order may be given by using the means of communication established.

SECTION III.

GENERAL RULES FOR AIR TRAFFIC.

112. *General.*—(1) Subject to the provisions of sub-rule (6) of this rule and clause (1) of rule 116, mechanically driven aerodynes shall always give way to non-mechanically-driven aerodynes and to aerostats, and mechanically-driven aerostats to non-mechanically-driven aerostats and aerodynes.

(2) An airship which is under way and which is not under control (or which has voluntarily stopped its engines) shall, for the application of the rules in Section III, be classed as a free balloon.

113. *Risk of collision.*—(1) When circumstances permit, an aircraft can ascertain risk of collision with another aircraft by carefully watching the successive compass bearings and angles of elevation of the latter. It shall consider that risk of collision with this other aircraft exists if neither the bearing nor the angle of elevation changes appreciably and if the distance between the two aircraft diminishes.

The term "risk of collision" includes all risk of accident due to undue proximity of other aircraft.

(2) Every aircraft which is required by these Rules to give way to another to avoid collision, shall keep a safe distance, having regard to the circumstances of the case.

(3) While observing the provisions relative to risk of collision contained in sub-rules (1) and (2), a mechanically-driven aircraft must always manoeuvre according to the provisions of sub-rules (4) and (8), as soon as it is apparent that, if it pursued its course, it would not pass clear of another aircraft.

(4) When two mechanically-driven aircraft are meeting end on or nearly end on, each shall, without prejudice to the application of the provisions of sub-rule (1), alter its course to the right.

(5) Subject to the application of the provisions of sub-rules (1) of this rule and sub-rule (3) of rule 116, when two mechanically-driven aircraft are on courses which cross, the aircraft which has the other on its own right side shall keep out of the way of the other.

(6) An aircraft overtaking any other shall keep out of the way of the overtaken aircraft by altering its own course to the right, and must not pass by diving.

Every aircraft coming up with another aircraft from any direction more than 110 degrees from ahead of the latter, *i.e.* in such a position with reference to the aircraft which it is overtaking that at night it would be unable to see either of that aircraft's side lights shall be deemed to be an overtaking aircraft, and no subsequent alteration of the bearing between the two aircraft shall make the overtaking aircraft a crossing aircraft within the meaning of these rules, or relieve it of the duty of keeping clear of the overtaken aircraft until it is finally past and clear.

As by day the overtaking aircraft cannot always know with certainty whether it is forward or abaft the direction mentioned above from the other aircraft, it should, if in doubt, assume that it is an overtaking aircraft and keep out of the way.

(7) Every aircraft which is obliged by the rules in Part XII to keep out of the way of another aircraft shall, if the circumstances of the case admit, avoid passing over or under the other, or crossing ahead of it.

(8) Where, by any of the rules in Part XII, one of two aircraft is to keep out of the way, the other shall keep its course and speed. When, however, in consequence of thick weather or any other cause, the aircraft having the right of way finds itself so close that collision cannot be avoided by the action of the giving-way aircraft alone, it shall take such action as will best aid to avert collision.

(9) Every aircraft in a cloud, fog, mist or other conditions of bad visibility, shall proceed with caution, having careful regard to the existing circumstances.

(10) Every aircraft flying beneath clouds shall always do so, so far it is safe and practicable, at such a distance below the clouds as will enable it readily to see and be seen.

114. *Risk of collision on air traffic routes.*—In order to obviate the increased risk of collision which exists on air traffic routes the following provisions shall be observed by aerodynes and airships when flying on or in the vicinity of such routes, namely :—

- (1) An aircraft flying by compass along the straight line (rhumb line) joining two points on an air traffic route in common use, shall keep such line at least 1,000 yards on its left.
- (2) An aircraft following, either an officially recognised air traffic route, or a route frequented by aircraft and indicated on the ground by a line of landmarks such as a road, railway, river, canal, coastline, etc., shall keep such route at least 300 yards on its left.
- (3) An aircraft shall not fly keeping on its right any of the lines or routes referred to in rule 114, except at a distance therefrom sufficient to avoid aircraft following such lines or routes in accordance with the said rule.
- (4) An aircraft crossing one of the lines or routes referred to in rule 114 shall cross it at right angles as rapidly as possible.
- (5) In the case of pre-arranged flights in group formation, the aircraft of the leader of the group shall lead the flight in such a manner that every aircraft in the group can comply with rule 114.

115. *Position of pilot.*—To facilitate the application of the rules for air traffic contained in this Part, the pilot of a mechanically-driven aerodyne shall, save in exceptional circumstances, be placed either in the plane of symmetry of the aerodyne or on the left hand side of such plane.

SECTION IV.

SPECIAL RULES FOR AIR TRAFFIC ON AND IN THE VICINITY OF ALL AERODROMES.

116. *Special rules.*—The following provisions shall apply on and in the vicinity of all aerodromes, namely :—

- (1) Aircraft about to land on an aerodrome shall be given free way.

(2) An aircraft about to take off shall not attempt to do so until there is no risk of collision with another aircraft.

(3) In the case of two mechanically-driven aerodynes approach in an aerodrome for the purpose of landing, the aerodyne flying at the greater height shall be responsible for avoiding the aerodyne at the lower height, but the latter shall, if the contingency arises, comply with the provisions of sub-rule (6) of rule 113.

SECTION V.

SPECIAL RULES FOR AIR TRAFFIC ON AND IN THE VICINITY OF AERODROMES OPEN TO PUBLIC USE.

A. GENERAL.

117. *Extent of application.*—(1) The provisions of Section V shall apply, on and in the vicinity of aerodromes open to public use. They concern only land and water aerodromes for mechanically-driven aerodynes, which are designed in the present section by the single word "aerodynes."

(2) Non-mechanically-driven aerodynes on and in the vicinity of aerodromes open to public use shall comply with the provisions of Section V as far as possible.

118. *Exemptions.*—The Governor General in Council may by special order in writing in this behalf temporarily suspend the application of all or any of the provisions of Section V with reference to any aerodromes in British India which is open to public use. Where any such order is for the time being in force with respect to any aerodrome the suspension shall be indicated by the appropriate signals provided for in sub-rule (3) of rule 105.

119. *Neutral zones.*—At land aerodromes, a neutral zone, situated along the perimeter of the landing area and at the approaches to the hangars, may be set apart for aerodynes manoeuvring on the ground.

B. FLIGHT OVER OR IN THE VICINITY OF THE LANDING AREA.

120. *Minimum Flying altitude.*—Subject to any special local regulations which may exist:

- (a) flight over a landing area at a lower height than 2,000 feet is prohibited for aerodynes, save in the case of a departure or landing;
- (b) every aerodyne flying outside a landing area at a distance of less than 2,000 yards from the nearest point of such area shall, unless it is flying at a greater height than 2,000 feet, keep the landing area on its left.

121. *Aerial acrobatics.*—Aerodynes are prohibited from engaging in aerial acrobatics in the vicinity of aerodromes, at a distance of less than two miles from the nearest point of the perimeter of the aerodrome, unless they are flying at a greater height than 6,000 feet.

122. *Landings by radio-electric guide.*—When an aerodyne is about to land by means of a radio-electric guide, other aerodynes, in order to avoid collision, must conform to any local rules in force which

may be applicable or, in default of such rules, fly as low as possible below the clouds.

123. *Fixed balloons and kites.*—No fixed balloon or kite shall be elevated in the vicinity of an aerodrome without a special authorisation.

C. RULES TO BE OBSERVED FOR DEPARTURES AND LANDINGS.

124. *Circuits.*—An aerodyne starting from or about to land on an aerodrome shall make a circuit or partial circuit and the turning shall be made clear of the landing area and shall be left-handed (anti-clockwise), so that during such circuit the landing area shall always be on its left.

As an exception, the turning shall be right-handed when the signal indicated in sub-rule (4) of rule 105 is displayed.

125. *Direction of take-off or landing.*—(1) Every aerodyne taking off from or landing at an aerodrome shall do so upwind, except when the natural conditions of the aerodrome do not permit. If, however, there is a landing T as provided for in clause (b) of sub-rule (1) of rule 105, or a line of lights as provided for in sub-clause (ii) of clause (d) of sub-rule (2) of rule 106, the aerodyne shall take off, or land in the direction indicated by this T (i.e., by following the direction of the long arm of the T towards the cross arm of that T) or by the line of lights.

(2) Landings shall be preceded by a descent in a straight line, commencing at least 300 yards outside the perimeter of the landing area.

(3) Every aerodyne landing at an aerodrome shall leave clear on its left any aerodyne which has already landed or is already landing, or which is taking off or about to take off.

(4) Every aerodyne taking off from an aerodrome shall leave clear on its left any aerodyne which is already taking off.

(5) In observing the provisions of rule 125, every aerodyne, when landing or taking off, shall leave a reasonable space on its right for other aerodynes to land or take off.

(6) At an aerodrome, taking off or landing simultaneously by two or more aerodynes, unless pre-arranged, is prohibited.

(7) For the purposes of rule 125, two or more aerodynes taking off or landing simultaneously by pre-arrangement shall be regarded as a single aerodyne.

126. *Zones for landings and departures.*—(1) By way of exception, at certain aerodromes, the landing area may be regarded as divided into two approximately equal zones, by a vertical plane bearing in the direction of departure and landing defined in sub-rule (1) of rule 125. For an observer facing in the direction towards which departures and landings are to be made, the zone on the right will be the one reserved for landings and the zone on the left the one reserved for departures. This special arrangement must be indicated by the signal provided for in sub-rule (2) of rule 105.

(2) Every aerodyne landing at one of these aerodromes shall do so in conformity with the provisions of sub-rules (1) and (2) of rule 125, as far as possible to the left in the zone reserved for that purpose, but leaving clear on its left any other aerodyne which has already landed or which is landing.

(3) Every aerodyne taking off from one of these aerodromes shall do so in conformity with the provisions of sub-rule (1) of rule 125, as far as possible to the left in the zone reserved for that purpose, but leaving clear on its left any other aerodynes which are already taking off.

127. *Take-offs.*—On land aerodromes having a ground control, no aerodyne having proceeded on to the landing area with the intention of taking off shall take off until it has received permission to do so by the signals prescribed in clause (b) of sub-rule (1), and clause (b) of sub-rule (2) of rule 108.

D. RULES TO BE OBSERVED FOR MANOEUVRES ON THE GROUND.

128. (1) *Land aerodromes.*—Every aerodyne moving on the ground in the landing area shall normally do so in the direction of landing. It may, however, in order to shorten its course, cross the landing area to reach its take-off point or the boundary, provided that, in the course of such movement, turns are always made to the left, that it gives free way to every aircraft leaving or landing and that it conforms to the provisions of sub-rules (4) and (8) of rule 113.

(2) *Water aerodromes.*—The rules for land aerodromes, contained in sub-rule (1) of this rule apply equally to water aerodromes, subject however to the provisions contained in rule 129.

(3) On aerodromes having a ground control, in addition to the observance of the provisions of sub-rules (1) and (2) of this rule, no aerodyne shall proceed on to the landing area until it has received permission to do so by the signal prescribed in clause (a) of sub-rule (1), or clause (a) of sub-rule (2) of rule 108.

SECTION VI.

RULES RELATING TO AIRCRAFT ON THE SURFACE OF THE WATER.

129. *Regulations for preventing collisions at sea.*—Every aircraft manoeuvring under its own power on the water shall conform to the regulations for preventing collisions at sea, and for the purposes of these regulations shall be deemed to be a steam-vessel:

Provided that—

- (a) in conforming with the abovementioned regulations, it shall be borne in mind that steam-vessels in narrow channels are not able to manoeuvre so as to avoid collision with aircraft;
- (b) the aircraft shall carry only the lights specified in Section I of this part, and not those prescribed for steam-vessels in the regulations for preventing collisions at sea; it shall use the sound signals specified in the abovementioned regulations only as specified in rule 103 and clause (d) of sub-rule (2) of rule 107; and it shall not be deemed to hear any sound signals.

SECTION VII.

MISCELLANEOUS PROVISIONS.

130. *Ballast.*—The dropping of ballast other than fine sand or water from aircraft in the air is prohibited.

131. *Observance of general and special rules for air traffic.*—In conforming with the provisions of Sections III, IV and V of this Part, due regard shall be had to all dangers of navigations, and collision and to any special circumstances which may render a departure from these rules necessary in order to avoid immediate danger.

132. *Neglect in the use of lights or signals, etc.*—Nothing in this Part shall exonerate any aircraft, or the owner, pilot or crew thereof, from the consequences of any neglect in the use of lights or signals, or of any neglect to keep a proper lookout, or of the neglect of any precaution which may be required by the ordinary practice of the air, or by the special circumstances of the case.

133. *Special orders relative to navigation of aircraft in the immediate vicinity of an aerodrome.*—Nothing in this Part shall interfere with the operation of any special rule or rules approved by the Governor General in Council and published relative to navigation of aircraft in the immediate vicinity of any aerodrome or other place, and it shall be obligatory on all owners, pilots, or crews of aircraft to obey such rules.

PART XIII—GENERAL.

134. *Inspection.*—Any person authorised by the Governor General in Council by special or general order in writing in this behalf may—

- (a) at all reasonable times enter any place to which access is necessary for the purpose of exercising his powers or carrying out his duties under these rules;
- (b) at all times during working hours enter that portion of any factory or place in which aircraft or parts of aircraft or aeroengines or parts of aero engines are being manufactured, overhauled, repaired or assembled and inspect any such factory or place, aircraft, aeroengines or parts and any drawings relating to such aircraft, aeroengines or parts;
- (c) at any time inspect any flying machine which is required by these rules to be certified as airworthy or in respect of which a certificate of airworthiness is in force;
- (d) enter, inspect and search any aircraft for the purpose of securing compliance with any of these rules.

135. *Forgery, etc. of documents.*—No person shall fraudulently lend any licence or certificate issued under these rules or allow it to be used by any other person.

136. *Foreign military aircraft.*—No person shall fly or land, or assist in flying or landing, any foreign military aircraft over or in British India except on or with the invitation or permission in writing of the Governor General in Council, and on such conditions as may be specified in the invitation or permission.

137. *Obstruction of authorised persons.*—No person shall voluntarily obstruct any person acting in the exercise of his powers or in the discharge of his duties under these rules.

138. *General power to exempt.*—The Governor General in Council may by general or special order in writing exempt any aircraft

or class of aircraft or any person or class of persons from the operation of these rules, either wholly or partially, subject to such conditions, if any, as may be specified in such order.

139. *Penalties.*—(1) Any person contravening any of these rules shall, where no punishment is provided for such contravention in the Indian Aircraft Act 1934 (XXII of 1934), be punishable to the extent laid down in Schedule VI to these rules.

(2) It shall be a defence to any proceedings for contravention of or failure to comply with, these rules if the contravention or failure is proved to have been due to accident, stress of weather or other unavoidable cause; and it shall be a defence to any proceedings under these rules, against the owner, hirer, operator, pilot or commander of an aircraft that the alleged contravention took place without his actual fault or privity.

SCHEDULE I.

(See rule 12).

Areas over which flight by aircraft is prohibited.

Area	Extent of prohibition
(1) The area included within a radius of one mile from the Towers of Silence on Malabar Hill, Bombay. (2) The North-West Frontier Province and the Political Agencies and tribal areas under the charge of the Governor of the North-West Frontier Province in his capacity of Agent to the Governor General. (3) All territory in British Baluchistan and Baluchistan Agency Territories comprised within the following areas:— (a) The District of Zhob..... (b) That part of the Districts of Sibi and Loralai lying to the north of the parallel of latitude passing through Kach. (c) The Quetta-Peshin District with the exception of territory lying to the south and east of the railway line from Kach through Bostan and Quetta to Spezand, and with the exception of territory lying within a radius of 15 miles from Quetta Railway Station. (d) That part of the District of Chagai lying to the north of the railway line from Spezand through Nushki and Dalbandin to Duzdap and all territory lying south of the railway within 20 miles of the Persia-Baluchistan Frontier.	Absolute.

Note.—These areas are shown on a map which may be obtained on application to the Director of Civil Aviation in India, Simla/New Delhi.

SCHEDULE II.

(See rule 41.)

*Proofs of Competency, Tests and Examinations for the Issue and
Renewal of Licences to Aircraft Personnel.*

Personnel.

The qualifications of which proofs are required from applicants for licences or renewal of licences are as set out below:—

SECTION A.—PRIVATE PILOT'S LICENCE ("A" LICENCE)
(FLYING MACHINES).

1. *Flying Experience*.—An applicant for the grant of a licence or the renewal of a licence shall be required to produce evidence of having carried out, during the six months immediately preceding the date of the application, not less than five hours soloflying.

2. *Flying Tests*.—(1) An applicant for the grant of a licence shall be required to carry out the following tests to the satisfaction of the examiners:—

(a) Tests for altitude and gliding flight: Two flights each finishing with a glide, the engines being completely throttled down at not less than 2,000 feet above the landing area. The landings shall be made without reopening the throttle and within 150 yards of a point fixed beforehand by the official examiners of the test.

(b) Test of skill: A flight around two posts (or buoys) situated 500 yards apart making a series of five figure-of-eight turns, each turn reaching one of the two posts (or buoys). This flight shall be made at an altitude of not more than 600 feet above the ground (or water) without touching the ground (or water). The landing shall be effected by—

(i) finally closing the throttle of the engine at latest when the aircraft touches the ground (or water);

(ii) finally stopping the flying machine without the use of brakes within a distance of 50 yards from a point fixed by the candidate before starting.

(c) Spinning test: A left hand and right hand spin. During this test the examiner shall be on board. The test shall be undertaken at such a height that normal flight is resumed after the spin at a height of not less than 2,000 feet above the ground.

(2) An applicant for the renewal of a licence who has not had the recent flying experience laid down in paragraph 1 of this section shall carry out the following tests to the satisfaction of the examiner:—

(a) Test of skill: Three figure of eight turns in accordance with sub-paragraph (1) of this paragraph.

- (b) Landing test: Three landings, finally stopping the aircraft on each occasion without the use of brakes within a distance of 50 yards from a point fixed by the applicant before starting.

(3) An applicant for the addition to his licence of a different type of aircraft may be required to carry out any of the foregoing tests and shall normally be required to carry out the landing test detailed in clause (b) of sub-paragraph (2).

3. *Technical Examination.*—An applicant for the grant of a licence shall be required to pass, to the satisfaction of the examiners, an examination in the following subjects:—

- (a) Rules as to Lights and Signals; General Rules for Air Traffic; Special Rules for Air Traffic on and in the vicinity of aerodromes open to public use.
- (b) International Air Legislation, with particular reference to the obligations of a pilot in international flights.
- (c) General knowledge of, in so far as they affect the responsibilities of a pilot, the rules made under the Indian Aircraft Act, 1934 (Act XXII of 1934), and Notices to Airman.

4. *Medical Examination.*—

(1) The medical examination shall be carried out by a medical practitioner who possesses qualifications entitling him to inclusion in the Medical Register of Great Britain, and who may be the applicant's usual medical attendant. Such examination shall be conducted in accordance with such form as may be prescribed by the Governor General in Council and a copy of that form, completed as required, shall be forwarded by the medical officer to the Director of Civil Aviation, Simla/Delhi, by whom copies of the form will be supplied on demand.

(2) The medical examination shall be based upon the following requirements of mental and physical fitness:—

(a) Good family and personal history, with particular reference to nervous stability, as to which information shall be given in a statement made and signed by the applicant and satisfactory to the medical examiner.

(b) *General surgical examination.*—The applicant must neither suffer from any wound or injury nor have undergone any operation, nor possess any abnormality, congenital or acquired, which might interfere with the safe handling of a private flying machine under ordinary conditions. Palpation of the abdomen and abdominal viscera, particularly the pyloric, vesicular duodenal and appendicular regions, whenever it reveals any swelling or distinct pain, must be completed by a radiosopic and radiographic examination.

Any anatomical lesion in the walls of any part whatever of the digestive tube, any stricture of its calibre, any calculus or foreign body, any peritoneal lesion, established by clinical or laboratory examinations, will entail rejection.

Exception may be made for spasmodic strictures not accompanied by other troubles and for ptosis compensated by a good abdominal musculature.

An applicant who has undergone a surgical intervention in the biliary passages or the digestive tube, except appendicitis, involving a total or partial excision or a diversion of any of these organs, shall be declared unfit unless (i) a period of two years has elapsed since the surgical intervention and the effects of the operation are not considered liable to cause sudden incapacity in the air, or (ii) an attestation made by a surgeon, having knowledge of the nature of the disease which necessitated the operation, certifies that no immediate or future consequences are to be feared.

Diseases of the liver (including those of the biliary passages) and of the pancreas shall in cases where it is deemed necessary be verified by laboratory examination, particularly by radiography as well as by an examination of the blood and of the urine, and shall entail rejection only if they afford indication of the existence of a calculus, tumour or lesion involving a persistent impairment of function of these organs.

(c) *General Medical Examination.*—The applicant must not suffer from any disease or disability which renders him liable suddenly to become incompetent in the management of aircraft. He must possess heart, lungs and nervous system in a state to withstand the effects of altitude. He must be free from kidney disease, and must not present any clinical sign of syphilis, nor have any cardiac lesion.

(d) *Eye Examination.*—The applicant must possess, with correction by glasses if necessary, a visual acuity equal to at least 70 per cent of the normal visual acuity for each eye taken separately. Visual acuity shall be measured by means of standard test types (optotypes) powerfully illuminated in such manner that the light does not shine directly into the eyes of the examinee. Binocular vision, ocular poise, ocular mobility, the field of vision of each eye and colour perception must be normal. With regard to colour perception, a candidate suffering from daltonism may however be accepted under the following conditions:—

- (i) if he is unable to distinguish pigmentary colours but is able to distinguish the coloured lights used in air navigation, his licence is rendered valid both for flight by night and for flight by day;
- (ii) if he is unable to distinguish either pigmentary colours or the coloured lights used in air navigation, his licence is rendered valid only for flight by day, that is to say, between sunrise and sunset.

(e) *Ear Examination.*—The middle ear must be healthy. The applicant must possess an auditory acuity not less than that corresponding with the perception of the

whispered voice at one metre. The vestibular mechanism must be intact and not hyper-sensitive. It must be equal on both sides.

- (f) *Nose, Throat and Mouth Examination.*—The applicant must possess free tubular air entry on both sides :

Provided that a person who does not satisfy the whole of the above medical requirements may, at the discretion of the Governor General in Council, be accepted, so far as such requirements are concerned, as eligible for the renewal of a licence, or for the issue of a licence if he has previously been found medically fit for flying :

Provided also that a person who does not satisfy all the above medical requirements may, at the discretion of the Governor General in Council, be accepted as eligible for the issue of a licence subject to such limitations as the Governor General in Council may impose and on the condition that the licence shall in no case be valid for flight outside India.

- (3) The medical examination shall take place before the commencement of flying instruction in the case of an application for the issue of a licence, and, in the case of an application for renewal of a licence, not earlier than 15 days before the date of expiry of the validity of the licence.
- (4) Every applicant who presents himself to undergo the medical examination required for the issue or renewal of a licence must furnish to the medical examiner a declaration signed by him stating whether he has previously undergone such a medical examination, and with what result. A false declaration shall render the applicant liable to the cancellation of any licence issued or renewed to him as the result of the examination.

SECTION B.—PILOT'S "A-1" LICENCE (FLYING MACHINES).

1. *Flying Experience*—

- (1) An applicant for the original endorsement of a licence shall be required to produce evidence of having carried out during the two years preceding the date of application not less than 100 hours solo flying (including not less than 30 landings) of which not less than 15 hours shall have been performed during the preceding six months, and of which not less than 25 hours shall consist of cross country flights :

Provided that, except in a case where the Governor General in Council is satisfied that the experience of the applicant as a pilot is sufficiently long and varied as to constitute equivalent experience, an applicant for the endorsement of his licence in respect of a type of flying machine fitted with two or more engines, shall be required to produce evidence of having carried out not less than 10 hours flying on a multi-engined flying machine either as first pilot or as second pilot.

- (2) An applicant for the renewal of the endorsement of his licence shall be required to produce evidence of having

and to have carried out during the preceding six months not less than 10 hours solo flying.

2. Flying Tests—

(1) An applicant for the original endorsement of a licence shall be required to carry out the following tests to the satisfaction of the examiner:—

(a) Single-engined flying machines—General flying for half an hour with an examiner on board, and including three landings.

(b) Multi-engined flying machines—General flying for half an hour with an examiner on board, during which the aircraft shall be flown with each engine in turn completely throttled down and during which three landings shall be made. Part of this flying shall be carried out with the aircraft light and part with the aircraft fully loaded.

(c) A cross country or overseas flight of at least 200 miles with an examiner on board and including three forced landings at points selected by the examiner. During this flight a height of 6,500 feet shall be maintained for a total period of one hour. The applicant will at the time of departure be informed of his route and furnished with the appropriate map. The examiner will judge whether the route has been correctly followed.

(2) An applicant for the endorsement of his licence in respect of an additional type of flying machine shall be required to carry out to the satisfaction of the examiner three landings with the aircraft light and three landings with the aircraft fully loaded:

Provided that an applicant for the addition to the endorsement on his licence for the first time of a type of flying machine with two or more engines shall be required to carry out the general flying test specified in clause (b) of sub-paragraph (1) of this paragraph.

(3) An applicant for the renewal of a licence who has not had the recent flying experience specified in sub-paragraph (2) of paragraph 1 shall be required to carry out the general flying tests laid down in sub-paragraph (1) of this paragraph and may also be required to carry out the other tests laid down in sub-paragraph (1) of this paragraph.

3. Technical Examination—

(1) An applicant for the issue of a licence shall be required to pass, to the satisfaction of the examiners, an examination in the following subjects:—

Group I.

(a) Flying machines: Theoretical knowledge of the laws of resistance of the air especially as concerns its effect on main plane structure, tail unit and air-screw; functions

of the different parts of flying machines and of the controls. Assembling of flying machines and their parts. Practical tests on rigging. Centre of gravity and loading. Principles of inspection and tests.

(b) Engines: General knowledge of internal combustion engines and the functions of the component parts; general knowledge of the construction, assembling, adjustment and characteristics of aero-engines; fuel and oil consumption and effect on range of aircraft; principles of inspection and tests. Causes of the faulty running of engines and of breakdown; practical tests in running repairs.

(c) Instruments: Principles and use of instruments prescribed for flying machines.

Group II.

(d) As set out in paragraph 3 of Section A for an applicant for Pilot's "A" licence.

(e) Elementary Navigation: Map reading and use of maps, care, use and compensation of the compass, determination of position and drift.

(2) The examination in flying machines and engines shall have reference to the particular types of flying machines or engines which are to be endorsed on the licence. The applicant may be required to undergo a further examination with reference to other types of flying machines and engines before the licence is endorsed for such other types.

(3) An applicant who fails to pass in any group shall be permitted to reappear not more than twice for examination in that group:

Provided that an applicant who does not pass in all groups of the technical examination within a period of six months from the date of the first examination shall be required to undergo the complete examination again.

4. *Medical Examination.*—The medical examination shall be based on the same requirements and shall be undertaken under the same conditions as set out in paragraph 4 of Section C for an applicant for Pilot's "B" licence.

SECTION C.—PILOT'S "B" LICENCE (FLYING MACHINES).

1. *Flying Experience.*

(1) (a) An applicant for the grant of a licence shall be required to produce evidence of having carried out during the three years preceding the date of application not less than 200 hours solo flying (including not less than 30 landings), of which not less than 15 hours shall have been performed during the preceding six months, and of which not less than five hours shall have been performed by night.

- (b) The applicant's flying experience shall include a minimum of 75 hours cross country flying, of which at least 5 hours shall consist of cross country flights carried out at night.
- (c) Except in a case where the Governor General in Council is satisfied that the experience of the applicant as a pilot is sufficiently long and varied as to constitute equivalent experience, an applicant for a licence in respect of a type of flying machine fitted with two or more engines shall be required to produce evidence of having included in the flying experience specified in this sub-paragraph not less than 10 hours solo flying on a multi-engined flying machine:

Provided that flying experience as the holder of an "A-1" licence while employed as second pilot in a flying machine fitted with dual control employed in air transport operations may be accepted in lieu of the solo flying experience specified in this paragraph but each hour of such experience shall count as half an hour of solo flying experience.

- (2) An applicant for the renewal of a licence shall be required to produce evidence of having carried out during the preceding six months not less than 10 hours solo flying.

2. *Flying Tests*—

- (1) An applicant for the grant of a licence shall be required to carry out the following test to the satisfaction of the examiners:—

- (a) *Altitude, gliding flight, skill and spinning tests*.—The same tests as are laid down in sub-paragraph (1) of paragraph 2 of Section A for a Pilot's "A" licence:

Provided that of such tests an applicant who is in possession of a valid Pilot's "A" licence shall be required to pass the spinning test only.

- (b) *Tests of navigation*.—Two cross country, of oversea flights of at least 200 miles each. As regards one of these, the flight shall be made in the same aircraft within eight hours, shall include two obligatory landings (when the machine must come to rest at points, other than the point of departure, fixed beforehand by the examiners) and shall terminate with a landing at the point of departure. During this flight a height of at least 6,500 feet shall be maintained for a total period of one hour: Provided that an applicant who is in possession of a valid Pilot's "A-1" licence may be exempted from this flight. On the second flight the examiner shall be on board and three forced landings shall be made at points selected by the examiner.

As regards both flights the applicant shall at the time of departure be informed of his route and furnished with the appropriate map. The examiners shall judge whether the route has been correctly followed.

(c) *General flying*—

- (i) Single-engined flying machines. General flying for about half an hour with an examiner on board and including three landings.
- (ii) Multi-engined flying machines. General flying for half an hour with an examiner on board during which the aircraft shall be flown with each engine in turn completely throttled down and during which three landings shall be made. Part of this flying shall be carried out with the aircraft light and part with the aircraft fully loaded.

Night flight—

- (i) A night flight of at least one hour carried out away from the aerodrome of departure at a height of at least 1,500 feet.
- (ii) Three landings of which at least two shall be made without the aid of a floodlight. Flares on the landing area may be used.

These flights shall be made between two hours after sunset and two hours before sunrise, on a dark night. The aircraft used for these tests shall be equipped with approved lighting equipment for effecting night landings.

(e) *Blind flying*.—A flight of not less than one hour in duration in the course of which the applicant, under the supervision of an examiner appointed by the Governor General in Council, shall without exterior view satisfactorily perform the following operations:—

- (i) Calculate and fly at least three different courses of not less than 15 miles each on directions given by the examiner stating the point of departure and point to be flown to.
- (ii) Carry out all ordinary manoeuvres and enter and recover from a spin:

Provided that the Governor General in Council may at his discretion exempt from this test an applicant who produces satisfactory evidence of having had experience in or of having completed a recognised course of training in instrument flying.

(2) An applicant for the endorsement of his licence in respect of an additional type of flying machine shall be required to carry out, to the satisfaction of the examiner, three landings with the aircraft light and three landings with the aircraft fully loaded:

Provided that an applicant for the addition to his licence for the first time of a type of flying machine with two or more engines shall be required to carry out the general flying test prescribed in sub-clause (ii) of clause (c) of sub-paragraph (1) of this paragraph.

(3) (i) An applicant for the renewal of a licence, who has not had the recent flying experience specified in sub-paragraph

(2) of paragraph 1, shall be required to carry out the general flying test laid down in sub-clause (i) of clause (c) of sub-paragraph (1) of this paragraph, but may be required to carry out any of the other tests laid down in sub-paragraph (1) of this paragraph.

(ii) An applicant for the renewal of a licence whose total night flying experience does not exceed 30 hours shall be required to pass the test laid down in sub-clause (ii) of clause (d) of sub-paragraph (1) of this paragraph.

3. *Technical Examination—*

(1) An applicant for the grant of a licence shall be required to pass, to the satisfaction of the examiners, an examination in the following subject:—

Group I.

(a) Flying machines: Theoretical knowledge of the laws of resistance of the air especially as concerns its effect on main plane structure, tail unit and airscrew; functions of the different parts of the flying machine and of the controls. Assembling of flying machines and their parts. Practical tests on rigging. Centre of gravity and loading principles of inspection and tests.

(b) Engines: General knowledge of internal combustion engines and the functions of the component parts; general knowledge of the construction, assembling, adjustment and characteristics of aero engines; fuel and oil consumption and effect on range of aircraft; principles of inspection and tests. Causes of the faulty running of engines and of breakdown; practical tests in running repairs.

(c) Instruments: Principles and use of instruments prescribed for flying machines, including blind flying instruments:

Provided that an applicant who is in possession of a valid Pilot's "A-1" license may be exempted from the examination in the subjects mentioned in this Group.

Group II.

(d) Elementary Navigation: Map reading and use of maps; compass, care, use and compensation; principles of dead reckoning navigation and the instruments in common use; principles of navigation by radio-goniometry.

(e) Rules as to Lights and Signals: General rules for air traffic, special rules for air traffic on and in the vicinity of aerodromes open to public use; rules for preventing collisions at sea.

(f) Practical knowledge of the special conditions of air traffic and of international air legislation. General knowledge in so far as they affect the responsibilities of a pilot, the rules made under the Indian Aircraft Act, 1934 (Act XXII of 1934), and Notices to Airmen.

*Group III.**(g) Elementary Meteorology.*

(2) The examination in flying machines and engines shall have reference to the particular types of flying machines or engines which are to be endorsed on the licence. The applicant may be required to undergo a further examination with reference to other types of flying machines and engines before the licence is endorsed for such other types.

(3) An applicant who fails to pass in any of the groups shall be permitted to appear not more than twice for examination in those groups:

Provided that an applicant who does not pass in all groups of the technical examination within a period of six months from the date of the first examination shall be required to undergo the complete examination again.

4. Medical Examination.—

(1) The medical examination shall be conducted by medical officers specially approved for the purpose by the Governor General in Council, and shall be based on the following requirements of mental and physical fitness:—

(a) *Preliminary.*—The applicant must have the complete use of his four limbs, must not be completely deprived of the use of either eye and must be free from any active or latent, acute or chronic, medical or surgical, disability, or infection. He must be free from any injury or wound which would entail any degree of functional incapacity which might interfere with the safe handling of aircraft at any altitude even in the case of prolonged or difficult flight. He must be completely free from hernia, must not suffer from any detectable sensory lesion, and must be free from a history of morbid mental or nervous trouble.

The applicant will be questioned concerning his family and personal history.

(b) *Examination of the nervous system.*—The examination of nervous system of the applicant shall comprise a full inquiry into family and personal history. The information obtained shall be given in a statement made and signed by the applicant and accompanied, if possible, by a certificate in regard especially to losses of consciousness, fits and convulsions of all kinds, from the applicant's ordinary medical adviser or a responsible person who has known him for a long time. This statement and this certificate must be such as to satisfy the examining medical officer. The applicant must not present any mental or tropic impairment, pathological tremor, or presumptive evidence of latent epilepsy. Motility sensibility, tendinous, cutaneous, and pupillary reflexes, co-ordination of movements and cerebellar functions, must be normal. An exception may be made for local peripheral trouble due to accidental section of a nerve branch.

Fractures of the cranium involving the internal table of the cranial box, even without apparent impairment, will entail temporary unfitness during a period of two years from the date of the fracture. Any presumed nervous syphilis will entail rejection, unless the non-existence of such an impairment is proved by an examination of the blood and an examination of the cerebrospinal fluid, made with the consent of the applicant.

(c) *General surgical examination.*—The requirements of this examination shall be the same as those laid down in clause (b) of sub-paragraph (2) of paragraph 4 of Section A for an applicant for a Pilot's "A" license, with the addition that the applicant must neither suffer from any wound or injury, nor have undergone any operation, nor possess any abnormality, congenital or acquired, which might interfere with the safe handling of a flying machine at any altitude even in the case of prolonged or difficult flight.

(d) *General medical examination.*—The applicant must not suffer from any disease or disability which renders him liable suddenly to become incompetent in the management of aircraft. His muscular power must be adequate for handling of the types of aircraft he will have to pilot or the apparatus he is to use. He must not have any signs of aneurism of the large arterial trunks, nor have any cardiac lesion, even if well compensated; the heart must be normal, with normal function and only respiratory arrhythmia, increase of pulse rate from excitement of exercise and a general slow pulse not associated with auriculo-ventricular dissociation will be allowed. The applicant must not suffer from any acute disability of the lungs, nor possess any cicatricial lesion of the lungs, and must be free from tuberculosis capable of being diagnosed by the usual clinical methods, from tracheobronchial disease of the glands, and from pulmonary emphysema, even if slight. However, with regard to the maintenance of the applicant's efficiency, pulmonary emphysema will entail rejection only when the pulmonary capacity falls below three and half litres at rest after full exhalation and inhalation and when the duration of the breath holding falls at rest below fifty seconds, or only forty seconds if the candidate is less than 5 feet or is of the female sex. In addition, each examination shall include a radiosopic record, in doubtful clinical cases. When the examination of the spleen and of the ganglionic tracts reveals hypertrophy of these organs, the candidate shall be declared unfit unless a hematological examination has shown that it is not a case of an original impairment of the hemotopoietic organs. Hemoglobinary, hemophily and purpuras shall also entail rejection, unless hematological examination shows that it is a case of only transitory impairment. The applicant must not present any signs of

in the case of organic diseases of the kidneys; these latter must be insensitive to palpation and of normal size. Renal ptosis shall entail rejection; this rule, however, shall not apply as regards the maintenance of efficiency if no functional trouble is involved. The urine must not contain any pathological element. Affections of the urinary passages and of the genital organs, even blennorrhœa, may entail temporary or definite unfitness, an exception being allowed as regards the maintenance of efficiency in the case of tuberculous orchio-epididymitis in its mild and localised form.

Applicants of the female sex must present a normal uterus and appendages. Cases in which surgical intervention has taken place shall be considered individually. Any presumed pregnancy shall entail rejection. Following confinement or miscarriage, the holder of a licence shall be allowed to resume her air duties only after having undergone a fresh medical examination.

The applicant must not present any clinical signs of syphilis. Dysentery shall be considered as an acute disease; provided that a presumption of dysenteric infection shall entail rejection, unless the medical examiner considers that the clinical phenomena have disappeared.

(e) *Eye examination*.—The applicant must possess a degree of visual acuity compatible with efficient performance of his duties. Binocular vision, ocular poise, ocular mobility, the field of vision of each eye and colour perception must be normal.

The applicant must possess, without correction by glasses, visual acuity equal to at least 80 per cent, of the normal visual acuity for each eye taken separately, or 90 per cent, for one eye and 70 per cent, for the other, the visual acuity being measured by means of standard test types powerfully illuminated in such a manner that the light does not shine directly into the eyes of the examinee.

(f) *Ear examination*.—The middle ear must be healthy. The applicant must possess an auditory acuity not less than corresponding with the normal perception of 64 vibrations per second, 256 vibrations per second and 4,096 vibrations per second, the forks being held perpendicularly to the ground one centimetre from the auditory tube. The vestibular mechanism must be intact and not hypersensitive; it must be equal on both sides.

(g) *Nose, throat and mouth examination*.—The applicant must possess free nasal and tubal air entry on both sides and must not suffer from serious, acute or chronic affections of the buccal cavity or upper respiratory tract.

Provided that an applicant who does not satisfy the whole of the above medical requirements may, at the discretion of the Governor-General in Council, be accepted, as far as such requirements are concerned, as eligible for

the renewal of a licence, or for the issue of a licence if he has previously been found medically fit for flying in accordance with the above requirements :

Provided further that an applicant who does not satisfy all the above medical requirements may, at the discretion of the Governor General in Council, be accepted, so far as such requirements are concerned, as eligible for the issue of a licence subject to such limitations as the Governor General in Council may impose and on the condition that the licence shall in no case be valid for flight outside India:

(2) In the case of an application for renewal of a licence the medical examination shall take place not earlier than 15 days before the date of expiry of the validity of licence.

(3) Every applicant who presents himself to undergo the medical examination required for the issue or renewal of a licence must furnish to the medical examiner a declaration signed by him stating whether he has previously undergone such a medical examination and with what result. A false declaration shall render the applicant liable to the cancellation of any licence issued or renewed to him as the result of the examination.

SECTION D.—PILOT INSTRUCTOR'S LICENCE.

1. *Flying experience* :—

(1) An applicant for the issue of a licence shall be required to produce evidence of having carried out not less than 500 hours solo flying, which shall be to the satisfaction of the Governor General in Council.

(2) An applicant for the renewal of a licence who has not given at least 50 hours flying tuition in the preceding 12 months, shall be required to pass the flying tests prescribed in paragraph 2 of this Section.

2. *Flying tests* —An applicant shall carry out such practical flying tests as may be required by the Governor General in Council or produce evidence of such qualifications as a pilot instructor as may be considered equivalent. The tests will include a demonstration by the candidate as instructor and the examiner as pupil.

3. *Technical examination*.—An applicant shall undergo such technical examination in the principles of flying instruction as may be required by the Governor-General in Council or produce evidence of such qualifications as a pilot instructor as may be considered equivalent. The examination shall include a demonstration by the candidate of his ability to lecture on any subject of examination for the Pilot's "B" licence, and shall test the candidate's knowledge of the rules made under the Indian Aircraft Act, 1934 (Act XXII of 1934), and of Notices to Airmen with particular reference to the training and licensing of pilots and the responsibilities of a pilot instructor.

4. *Medical examination*.—The medical examination shall be based on the same requirements and shall be undertaken under the

same conditions as set out in paragraph 4 of Section C, of this Schedule for a Pilot's "B" Licence.

SECTION E.—NAVIGATOR'S LICENCE.

1. *Flying experience.*—

- (1) An applicant for a second class licence shall be required to produce evidence of having had at least two years' air experience, during which at least 300 hours shall have been spent in the air.
- (2) An applicant for a first class licence shall be required to produce evidence of having had at least four years' air experience, during which at least 600 hours shall have been spent in the air, not less than 100 hours of this being experience of navigation in the air, of which not less than 15 hours shall have been obtained in connection with cross country flights made between two hours after sunset and two hours before sunrise.
- (3) In this paragraph the expression "air experience" means experience as an operative member of the crew of an aircraft.

2. *Technical examination.*—

- (1) An applicant for a second class licence shall be required to pass to the satisfaction of the examiners an examination on the following subjects:—
 - (a) Form of the earth; its divisions and their notation; mathematical calculation of the various elements by plane trigonometry to obtain course and distance.
 - (b) Maps and charts; how to read and use them; practical properties of different projections used in aviation.
 - (c) Compasses, their construction, use, and adjustment; elementary principles of earth's magnetism.
 - (d) Flight by dead reckoning; with the use of instruments for the measurement and calculation of the elements of the triangle of velocities.
 - (e) Navigation by radiogoniometry; methods of fixing the position of an aircraft with the application of the necessary corrections.
 - (f) International air legislation; regulations for the prevention of collisions at sea; publications for the assistance of navigators.
 - (g) Signalling; semaphore flashing, and international code flags.
 - (h) Meteorology; knowledge of meteorological elements and observations; arrangements for the issue of meteorological reports for aviation; principles of forecasting; construction and interpretation of synoptic charts; climatology.
- (2) An applicant for a first class licence shall be required to pass to the satisfaction of the examiners an examination on the following subjects:—

- (a) Form of the earth; as in clause (a) of sub-paragraph (1) with the addition of mathematical calculation of various elements by spherical trigonometry (great circle courses and distances).
 - (b) Maps and charts: as in clause (b) of sub-paragraph (1) with the addition of the principles of construction of the different projections used in aviation.
 - (c) Tides; elementary theory and prediction by the aid of tables.
 - (d) Compasses, as in clause (c) of sub-paragraph (1): more advanced knowledge.
 - (e) Flight by dead reckoning, as in clause (d) of sub-paragraph (1).
 - (f) Navigation by radiogoniometry, as in clause (e) of sub-paragraph (1).
 - (g) International air legislation, etc., as in clause (f) of sub-paragraph (1).
 - (h) Signalling, as in clause (g) of sub-paragraph (1).
 - (i) Astronomical navigation; various methods of fixing the position of an aircraft, with the use and care of tables, diagrams, and instruments for the solution of this problem; knowledge of the mathematics involved.
 - (j) Meteorology, as in clause (h) of sub-paragraph (1): more advanced knowledge.
- (3) The arrangement of subjects detailed in this paragraph shall not necessarily be that adopted in the examination where two or more subjects may be grouped into one paper. The examination shall usually be written but shall be accompanied by oral and practical tests.

3. *Medical examination.*—The medical examination shall be conducted by medical officers specially approved by the Governor General in Council, shall be based upon the same requirements and shall be undertaken under the same conditions as set out in paragraph 4 of Section A for a Pilot's "A" Licence with the following modifications:—

- (1) *General surgical examination.*—The applicant must neither suffer from any wound or injury nor have undergone any operation, nor possess any abnormality, congenital or acquired, which might interfere with the performance of his duties. The remaining conditions for this examination shall be the same as those set out in clause (b) of sub-paragraph (2) of paragraph 4 of Section A.
- (2) *General medical examination.*—The applicant must not suffer from any disease or disability which might interfere with the performance of his duties. The remaining conditions for this examination shall be the same as those set out in clause (c) of sub-paragraph (2) of paragraph 4 of Section A.
- (3) *Eye examination.*—The applicant must possess, with correction by glasses if necessary, a visual acuity equal to 100 per cent, that is to say normal, for each eye taken separately.

SECTION F.—RADIO-TELEGRAPH OPERATOR'S LICENCES.

1. *Flying experience.*—

- (1) For the original grant of a licence, the applicant shall be required to produce evidence of having had the following minimum air experience while performing satisfactorily in an aircraft the duties of a radio-telegraph operator :—
 - (a) Radio-telephone licence—ten hours as a radio-telephone operator.
 - (b) Second Class licence—twenty hours
 - (c) First Class licence—seventy hours.
- (2) For the renewal of a licence, the applicant shall be required to produce evidence of having had, during the two years immediately preceding the date of application, the air experience specified in sub-rule (1) for the original grant of the licence.

2. *Medical examination.*—

- (1) An applicant for a licence shall be required to undergo a medical examination, by medical officers specially approved for the purpose by the Governor General in Council. This examination shall be based on the requirements set out in paragraph 4 of Section A, with the following modifications, namely :—
 - (a) Normal colour perception shall not be required ;
 - (b) Binocular vision, ocular poise and ocular mobility may be subnormal ;
 - (c) Visual acuity may be reduced for the two eyes with correction by glasses to a total of 50 per cent of the normal visual acuity, it being admitted that one eye may be entirely lacking.
- (2) Special attention shall be paid to the following requirements :—
 - (a) freedom of nasal air passage ;
 - (b) patency of Eustachian tubes ;
 - (c) absence of active otitis media ; absence of ceruminous or epidermal plugs ;
 - (d) perception of the whispered voice at seven feet or more for each ear ;
 - (e) perfect perception of air vibrations between 512 and 2,048 ;
 - (f) absence of symptoms of serious labyrinthine disorder (vertigo, vomiting, loss of balance) whether spontaneous or easily evoked.

SECTION G.—GENERAL.

1. The evidence normally required as proof of flying experience shall consist of the production of a Pilot's Log Book certified by a responsible authority, or of a certified extract therefrom in the prescribed form. Such flying experience shall be to the satisfaction of the Governor General in Council.

2. Flight by night for the purpose of this Schedule, except where otherwise stated, means flight performed between the hours of one hour after sunset and one hour before sunrise.

3. A cross country flight for the purpose of this Schedule means a flight of not less than 100 miles from the aerodrome from which the flight started, whether over land or sea.

4. In each flying test, unless otherwise specified, the candidate shall be alone in the flying machine.

5. The flying tests specified in Sections A to D, respectively shall be carried out within a maximum period of two months; and together with the technical examinations specified in these Sections, shall be completed within a period of six months preceding the date of issue of the licence.

The flying tests may be carried out in any order and each may be attempted twice. They shall be witnessed by at least two properly accredited examiners who shall hand over the official reports to the proper authorities.

The official reports shall give full details of flights, especially of the landings. The candidates shall, on demand by the examiners, furnish, before each test, proof of identity.

A barograph shall be carried on all height tests, and the graph signed by the two examiners shall be attached to their report.

6. All landings carried out in the course of the flying tests specified in Sections A to D, respectively, shall be normal three point landings to the satisfaction of the examiner.

7. (1) Application for the grant of licences should be made to the Director of Civil Aviation, Simla/Delhi, by whom all the necessary forms shall be supplied on demand.

(2) Such applications shall be accompanied by—

(a) three unmounted photographs of the applicant's head uncovered, the image of the head measuring approximately $1\frac{1}{2}'' \times \frac{3}{4}''$.

(b) the necessary medical certificates, and examiner's reports where these have not been sent direct;

(c) the treasury receipt for the payment of the fee due.

8. An applicant who fails in any subject of the technical examinations specified in Sections A to D shall not be permitted to appear for re-examination for a period of 3 months or such lesser period as may be intimated by the examiner or by the Director of Civil Aviation in India.

SCHEDULE III.

(See Part VI.)

DETAILED CONDITIONS APPLICABLE TO THE ISSUE, VALIDITY AND RENEWAL OF CERTIFICATES OF AIRWORTHINESS, AND GROUND ENGINEERS' LICENCES.

SECTION A.

Classification of flying machines.

1. Every flying machine for which a certificate of airworthiness is granted shall be classified on such certificate as belonging to one of

following categories and one or more of the following sub-divisions:—

(1) *Normal Category*:—

Sub-division (a).—Passenger machines.

Sub-division (b).—Mail machines.

Sub-division (c).—Goods machines.

Sub-division (d).—Aerial work machines.

Sub-division (e).—Private machines.

(2) *Special Category*:—

Sub-division (f).—Racing or record machines.

“Racing or record machines” means machines which are specially intended or arranged for the purpose of sporting or technical performances, to the exclusion of all other uses.

Sub-division (g).—Research or experimental machines.

“Research or experimental machines” means machines which are specially intended or arranged for the purpose of experimenting in flight with new apparatus, to the exclusion of all other uses.

(3) *Acrobatic Category*:—

Sub-divisions (a) to (g) as in the two preceding categories.

Notes.—(i) An aerial work machine may be limited by the certificate of airworthiness to specific purposes for which it is designed or equipped.

(ii) Machines in the Normal Category must not be flown at indicated air speeds greatly in excess of the indicated air speed corresponding to steady horizontal flight at the international number of revolutions per minute, as specified in the certificate of airworthiness, at the rated altitude of the engine (s) and must in no circumstances be flown at speeds greater than 50 per cent in excess of this speed. They are limited to normal flight.

(iii) The conditions of flight for machines in the Special Category shall be determined for each individual machine on its merits. Flights of such machines may, as a precautionary measure, be limited to certain areas and to certain periods.

(iv) Machines in the Acrobatic Category shall not be restricted as to the indicated air speed at which they may be flown and shall not be limited to normal flight.

(v) The Category in which a flying machine may be given a certificate of airworthiness shall depend upon its load factors, its performance and its equipment.

2. A flying machine which is classified in any sub-division in the Normal or Special Category may be used for any of the sub-divisions which follow in those categories, and a flying machine which is classified in any sub-division in the Acrobatic Category may be used for any of the sub-divisions which follow in that category, provided in each case that while being so used all the conditions (including those relating to the equipment and operation of the machine) applicable to the sub-division concerned shall be complied with.

SECTION B.

Instruments and equipment to be carried by flying machines.

1. The following instruments and equipment shall be required in the circumstances detailed to be carried when flying by flying machines which are required to be provided with a certificate of airworthiness:—

(1) In all flying machines:—

(a) For all flights:—

The instruments specified in rule 52, in addition—

Hand fire extinguisher in each main compartment carrying personnel.

(b) For flights which extend beyond a radius of 3 miles from the point of departure:—

Equipment, as required by the circumstances of the case, for making the signals prescribed in these Rules.

(c) For flights any part of which takes place between sunset and sunrise:—

Navigation lights, illumination for instruments and equipment.

(2) In public transport flying machines, in addition:—

(d) For flights which extend beyond a radius of 20 miles from the point of departure:—

Compass.

Watch.

Map or maps to cover the whole route of the proposed flight.

Turn Indicator.

Sensitive Altimeter, when radio-telegraph apparatus is carried.

Pitch Indicator

} for machines operating on a regular scheduled air service.

(e) For flights at any point of which the machine is more than 10 miles from the nearest land:—

Life belt for each person on board.

(f) For flights any part of which takes place between the hours of sunset and sunrise observed respectively at the ground level of the region flown over and at any point of which the machine is more than 3 miles from the nearest lighted aerodrome approved for night flying:—

Approved lighting equipment for effecting night landings.

(g) For flights on which a licensed navigator is required, by Part V of these rules, to be carried:—

Drift Indicator, for machines with seating accommodation, as shown in the certificate of airworthiness, for more than five persons.

Chart table.

Navigator's instruments.

Navigator's air speed indicator.

Navigator's altimeter.

Navigator's compass.

} As may be required by the duties and location of the navigator.

Note.—The rules with regard to carriage of radio-telegraph apparatus are contained in Parts II and VII.

- (h) For flights over uninhabited or sparsely inhabited regions:—
Two days' supply of water and food for each person on board.

SECTION C.

Weighing and marking of flying machines.

1. Every flying machine shall be weighed:—
 - (a) before a certificate of airworthiness is issued in respect thereof; and
 - (b) at such times after the issue of a certificate of airworthiness as the Governor General in Council may require.
2. Every flying machine for which a certificate of airworthiness is for the time being in force shall bear clearly painted upon it in a prominent position:—
 - (a) its weight empty (including water in radiators), as ascertained at its last previous weighting; and
 - (b) the maximum total weight authorised for it, as shown for the time being in its certificate of airworthiness;
 and shall carry displayed in a prominent position inside it a weight schedule showing what items of equipment (if any) are included in the "weight empty (including water in radiators)" as painted on it.

SECTION D.

Inspection of aircraft before flight.

1. *Conditions of inspection.*—The inspection of a flying machine required by rule 60 shall be in accordance with the following provisions:—
 - (a) Inspection of the flying machine (including its instruments and equipment, but exclusive of the engine or engines and engine installation and of the instruments relating thereto) shall be carried out by a ground engineer licensed in Category A in respect of aircraft of the type in question.
 - (b) Inspection of the engine or engines and engine installation and of the instruments relating thereto shall be carried out by a ground engineer licensed in Category C in respect of engines of the type or types in question.
 - (c) The whole of the inspection may be carried out by the same ground engineer, provided that he shall be licensed both in Category A and in Category C in respect of aircraft and engines of the types in question.
2. *Form of ground engineer's certificate.*—The certificate of the ground engineer required by rule 60.(2) shall be made out in duplicate in the following form:—

Certificate of safety for flight.

Aircraft Type

Nationality and Registration Marks

- (a) I hereby certify that I have this day inspected the above aircraft [including its instruments and equipment, but exclusive of the engine(s) and engine installation and of the instruments relating thereto], and that I am satisfied that it is safe in every way for flight, provided that the conditions of loading specified in the certificate of airworthiness are complied with.

(Signed)

Ground Engineer; Licence No.

Category

Date

Time

- (b) And I hereby certify that I have this day inspected the engine(s) and engine installation (including the instruments relating thereto) of the above aircraft and that I am satisfied that they are in every way fit for flight.

(Signed)

Ground Engineer; Licence No.

Category

Date

Time

3. *Pilot's inspection.*—The inspection of a flying machine required by sub-rule (3) of rule 60 shall be such as to satisfy the pilot or person in charge of the flying machine on the points enumerated hereunder—

- (a) the aircraft is equipped with the prescribed instruments and equipment;
- (b) the controls of the machine are working freely in the correct sense, and the engines are giving their correct revolutions;
- (c) the aircraft is satisfactorily loaded with respect to total load and distribution of load as specified in the certificate of airworthiness, with such modification as may be necessitated by the conditions of the proposed flight;
- (d) the view of the pilot is not interfered with by any obstruction not forming part of the structure of the aircraft;
- (e) sufficient fuel, oil and water are on board for the purpose of the proposed flight, and the fuel and oil are of a grade specified by the manufacturer of the engine;

and in the case of every flying machine which is required by rule 15 to be certified as airworthy:—

- (f) the aircraft, engines, instruments and equipment have been certified by a ground engineer holding the appropriate licence as fit in every way for the proposed flight, in accordance with rule 60.

4. *Load sheet.*—In the case of a public transport flying machine effecting public transport on a regular air service, a load sheet shall be

completed by the person superintending the loading and such load sheet shall be submitted to the pilot or person in charge for the purpose of satisfying himself that the conditions set out in clause (c) of paragraph 3 have been complied with.

5. *Disposal of certificates.*—Of the copies of the certificates referred to in this Section, one copy shall be retained by the owner or operator of the aircraft, and one copy shall be carried in the journey log book until replaced by a further certificate issued under this Section. The load sheet shall be kept by the owner or operator of the aircraft. Certificates and load sheets shall be kept for six months from the date of their completion.

SECTION E.

Inspection of aircraft and aero-engines after overhaul, repair, etc.

1. *Conditions of inspection.*—When any flying machine which is required by these Rules to be certified as airworthy or in respect of which a certificate of airworthiness has been issued by the Governor General in Council or the engine or engines of such flying machine is or are overhauled, repaired or modified, or when any part thereof is replaced, the flying machine shall not fly again, except in so far as flying machines which have no certificate of airworthiness are permitted to fly under these Rules unless and until the following conditions have been complied with:—

- (1) The work shall be completed in all essential respects in accordance with—
 - (a) the approved type design in conformity with which the aircraft or engine was constructed, including any modifications to that design or to the aircraft or engine which may have been required or approved by the Governor General in Council or
 - (b) a repair scheme which has been approved by the Governor General in Council.
- (2) The materials used shall be not inferior to those authorized for the type design in conformity with which the aircraft or engine was constructed.
- (3) The work shall be inspected in accordance with the provisions respecting inspection of subsequent aircraft or engines applicable to the case.
- (4) A certificate in the form set out in paragraph 3 of this Section, shall be obtained:

Provided that, in the case of repairs where it is not reasonably practicable to comply with the above requirements, whether by reason of particulars of the type design not being available or otherwise, a temporary repair may be made for the purpose of enabling the aircraft to proceed directly to the nearest place at which a repair complying with the above requirements can be carried out, and, if the pilot is satisfied that, having regard to all the circumstances of the case, such repair is adequate for the purpose, the aircraft may then proceed to fly to such place:

Provided further that, if it is proposed that such temporary repair shall remain in service, it shall be treated as a modification requiring

the approval of the Governor General in Council and until such approval has been obtained the aircraft shall not fly except as specified in the preceding proviso or in so far as aircraft which have no certificate of airworthiness are permitted to fly under these Rules.

2. *Inspection requirements.*—The following conditions shall be complied with in the inspection of flying machines or engines during construction (including overhaul), repair, modification, or replacements, namely:—

- (1) All materials used in the construction of the aircraft or engine shall be in accordance with the approved specification for the first aircraft or engine constructed of that particular type and such material shall be adequately identified as being of the approved specification or shall be proved to comply with such specification by suitable examination, sampling and testing.
- (2) The constructor's inspecting staff shall stamp, or otherwise provide means for the identification of, all parts approved by them for incorporation in the aircraft or engine in such a way that the person so approving each such part can subsequently be identified.
- (3) Only parts which have been approved in accordance with clause (2) may be issued to the workshops for assembly into the aircraft or engine.
- (4) The constructor shall maintain an efficient process inspection during the work of assembly, and record the progress of such inspection for each component. Every component shall be finally inspected and approved by a qualified member of his inspection staff, who shall mark the component in such a way that he may afterwards be identified as the person having so approved it and shall also sign the inspection record.
- (5) Operations such as heat treatment of steels and nonferrous metals, seasoning and conversion of timber, glueing of important parts, doping, welding, whitemetalling, brazing and soldering shall be carried out by methods approved by the Governor General in Council.
- (6) The constructor shall ensure that all components and parts obtained from sub-contractors have been inspected and approved in accordance with these conditions.
- (7) The constructor shall ensure that all engines fitted in the aircraft have been inspected and approved in accordance with these conditions and have passed satisfactory tests. The constructor shall provide adequate facilities for these tests.
- (8) The constructor shall ensure that the instruments and equipment fitted in accordance with Section B have been manufactured, and any repairs thereto executed, in accordance with approved specifications.
- (9) The aircraft constructor shall ensure by suitable inspection that all engines, instruments and parts (including wiring for electrical equipment and radio-telegraph apparatus) which are fitted into the aircraft are so installed as to function correctly. The persons responsible for such

inspection shall be indicated by signatures on the inspection record referred to in clause (4).

3. *Form of certificate.*—The certificate referred to in clause (4) of paragraph 1 shall be appended to the written particulars of the overhaul, repair, modification or replacement to which it relates, and shall be in the following form:—

I hereby certify that in carrying out the overhaul, repair, modification, replacement, specified above, all the conditions required for the inspection of subsequent aircraft (aero-engines) during construction which are applicable to this aircraft (aero-engine) have been complied with.

Signed

Designation

Date

4. *Persons authorised to give certificates.*—The certificate referred to in clause (4) of paragraph 1 shall be signed by a ground engineer qualified under the terms and conditions of his licence to carry out or inspect the overhaul, repair, modification, or replacement to which the certificate relates, or by a person authorised by a firm or company approved by the Governor General in Council in this behalf, or, where the overhaul, repair, or replacement has been carried out at a Royal Air Force workshop by Royal Air Force personnel, by the officer in charge of that workshop.

5. *Ground engineers authorised to inspect.*—The categories of ground engineers who are authorised to inspect overhauls, replacements, modifications and repairs are as follows:—

- (a) inspection of flying machines, excluding engines—a ground engineer licensed in Category B in respect of aircraft of the type in question.
- (b) Inspection of engines—a ground engineer licensed in Category D in respect of engines of the type in question.
- (c) Inspection of instruments, equipment and accessories of aircraft and engines—a ground engineer licensed in Category X in respect of the type of instrument, equipment or accessory in question.

6. *Disposal of certificates.*—The certificate referred to in clause (4) of paragraph 1 shall, when it relates to the aircraft exclusive of the engine or engines, be written in the aircraft log book, or, when it relates to the engine or engines, be written in the engine log book, or when it relates to instruments, equipment and accessories, in the aircraft or engine log book as may be most appropriate:

Provided that, if the appropriate log book is not at the place where the overhaul, repair, modification, or replacement is carried out, the certificate may be given separately, but shall be pasted in the log book as soon as practicable and shall be kept with the working copy of the log book until so pasted.

7. *Inspection after damage.*—When structural damage which materially impairs its safety occurs to an aircraft in respect of which

a certificate of airworthiness is required by these Rules, the aircraft shall not again fly until the damage has been repaired and a certificate has been obtained in accordance with this section.

8. *Defective parts.* When any part of an aircraft, an aero-engine or an instrument or equipment of an aircraft is revealed by inspection to be defective, the Governor General in Council may require it to be delivered to a person authorised by him in this behalf for examination; and on a request being made by the owner such part shall be returned to him after examination.

SECTION F.

Ground Engineers' Licences. Qualifying Tests and Examinations.

1. *Practical experience required.*—(1) An applicant for the grant of a licence under rule 61 shall normally be required to satisfy the examiner appointed or approved by the Governor General in Council in this behalf that he has the qualifications and has had the practical experience detailed below for the appropriate category of licence:—

Category A.—Not less than two years on aircraft maintenance or construction and maintenance.

Category B.—Not less than two years on aircraft construction, including overhaul and the testing of materials used in aircraft construction, and not less than four years in all on aircraft construction and maintenance. The applicant must be the holder of a licence in Category A.

Category C.—Not less than two years on aero-engine maintenance or construction and maintenance.

Category D.—Not less than two years on aero-engine construction, including overhaul and the testing of materials used in aero-engine construction, and not less than four years in all on aero-engine construction and maintenance. The applicant must be the holder of a licence in Category C.

Category X.—Such practical experience of the particular work of which the licence is required as in the opinion of the authorised examiners will enable the candidate to perform satisfactorily the duties for which the licence is required.

(2) A shorter period of practical experience than that specified may be accepted as sufficient on proof that the candidate has otherwise acquired adequate engineering experience which may be applied to the construction or maintenance of aircraft, aero-engines, instruments, accessories or equipment as the case may require.

(3) A candidate whose experience is limited to particular types of construction, methods of overhaul or materials may be granted a licence restricted to those particular types of construction, methods of overhaul or materials:

Provided that an applicant for such a restricted licence in Category B or D shall have had not less than one year's experience in the complete overhaul or construction and overhaul of aircraft or aero-engines, as the case may be, and not less than three years' experience

in all in aircraft construction, overhaul and maintenance, or aero-engine construction, overhaul and maintenance, as the case may be, and shall, if an applicant for a B licence, have held an A licence for one year, and, if an applicant for a D licence, have held a C licence for one year.

2. (1) *Technical examination.*—An applicant for the grant of a licence shall be required to pass to the satisfaction of the examiner an examination in the subjects detailed below for the appropriate category of licence:—

For all Categories.

Duties and responsibilities of a ground engineer; approved materials and distribution procedure; procedure regarding modifications; forms and procedure regarding certificates and log book entries; prescribed equipment of aircraft; general principles of engineering practice.

Category A.

Inspection of air craft before flight.

Elementary theory of flight as applied to rigging;
Erection and inspection of aircraft and adjustment of flying controls;
Inspection for wear and tear and inspection after accident;
Methods of carrying out repairs, replacements and modifications permitted under Category A;
Common defects of aircraft components;
Fitting and inspection of airscrews;
Principles of construction, installation and inspection of air speed indicators and altimeters;
Principles of construction, installation and inspection of various types of turn indicators and electrical equipment;
Erection, truing and inspection of hulls and floats.

Category B.—

Inspection of aircraft during construction or overhaul.

The subjects for Category A, and in addition:—

Processes of manufacture, inspection, testing and identification of aircraft materials and parts;
Methods of repair, assembly, inspection and testing of aircraft components and complete aircraft.

Category C.

Inspection of aero-engines before flight.

Principles of internal combustion engines;
Constructional details of types of aero-engines;
Top overhaul; methods, common defects and permissible allowances for wear and distortion;
Clearances and tolerances, use of measuring instruments, and knowledge of principles of expansion of metals;
System of carburation, ignition and lubrication;
Detection and correction of running defects;

Installation of engines and inspection of installation and engine controls ;
 Fitting and inspection of airscrews ;
 Principles of construction, installation and inspection of aero-engine instruments ;
 Routine inspection and testing of aero-engines preparatory to flight.

Category D.

Inspection of aero-engines during construction or complete overhaul.

The subjects of Category C, and in addition :—

Processes of manufacture, inspection, testing and identification of aero-engine materials and parts ;
 Methods of repair, assembly, inspection and testing of aero-engine components and complete aero-engines.

Note.—In the case of restricted B and D licences, such portions of the appropriate syllabus may be omitted as the examiner thinks fit.

Category X.

One or more of the following subjects according to the purpose for which the licence is required :—

- (1) Repair, overhaul and testing of magnetos.
- (2) Repair, overhaul, testing and calibration of aircraft and aero-engine instruments.
- (3) Inspection, packing and maintenance of parachutes.
- (4) Installation and compensation of compasses in aircraft.
- (5) Construction and repair by welding.

(2) The examiners may require a candidate to undergo a practical test in any of the subjects of examination.

(3) An applicant for the renewal of a licence who has not, since the issue of the licence, been employed on the work for which the licence was issued may be required to undergo re-examination as a condition of the renewal of the licence.

SECTION G.

General.

1. Application for the issue or renewal of certificates of airworthiness and ground engineers' licenses shall be made to the Director of Civil Aviation in India, Simla/New Delhi, by whom all the necessary forms shall be supplied on demand, and by whom instructions shall be issued as to the place and time of inspection or examination and as to further information or evidence required for the purpose of the issue of the certificate or licence.

2. The detailed syllabus of examination for ground engineers shall be supplied by the Director of Civil Aviation in India, Simla/New Delhi, on demand.

SCHEDULE V.

AERODROMES.

Section A.—Requisites to grant of licence.

(See rule 86.)

1. The landing area shall be of adequate dimensions for the type of aircraft in respect of which the licence is required, having regard to the altitude of the ground and the nature of surrounding obstructions.

2. The landing area shall be sufficiently level and smooth to present no danger to aircraft landing or taking off, and sufficiently firm in the conditions in which it is to be used to withstand the weight of the aircraft to be used.

3. The landing area shall be adequately marked with boundary marks and such bad ground, or others, markings as may be considered necessary by the Director of Civil Aviation in India.

4. For an aerodrome to be used for night flying, the following equipment shall be provided, namely—Boundary lights, obstruction lights, illuminated wind indicator, and either flares or floodlight.

5. The direction of the wind shall be clearly indicated by one or more of the recognised methods approved by the Director of Civil Aviation in India.

6. For an aerodrome open to public use such international signals shall be displayed as may be specified by the Director of Civil Aviation in India.

Section B.—Tariff of landing and housing charges at Government Aerodromes.

(See Rule 82.)

1. The charges for landing and housing of aircraft, other than airships, at Government aerodromes shall be as follows :—

Type of aircraft	Landing fees						Housing fees (excluding landing fees)		
	For machines fitted with tail skids		For machines fitted with tail wheels		Extra for each landing or machines fitted with Wireless Telegraph	Extra for each landing or departure at night	Up to 24 hours	For one month (At a specified aerodrome)	
	For single landing	Covering all landings in one month at specified aerodrome	For single landing	Covering all landings in one month at a specified aerodrome					
	Rs.	a.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
AA.—Small type occupying not more than 500 sq. ft. of area.	1	0	15	1	15	2	2	1	15
A.—Small type occupying more than 500 sq. ft. but not more than 1,000 sq. ft.	1	8	25	1	15	2	2	2	30
B.—Medium type occupying over 1,000 sq. ft. but not more than 2,000 sq. ft.	3	0	90	2	60	2	2	6	90
C.—Large type occupying over 2,000 sq. ft. but not more than 4,000 sq. ft.	8	0	240	6	180	5	5	15	225
D.—Large type occupying more than 4,000 sq. ft. and not more than 10,000 sq. ft.	15	0	450	11	330	5	5	30	450
E.—Large type occupying more than 10,000 sq. ft.	25	0	750	20	600	10	10	40	600

2. For landing purposes, the area of an aircraft shall be calculated as the product of the span and the length of the aircraft.

3. The payment of the landing fee shall entitle aircraft to the use of the landing ground for alighting and departure, to the supply of all available information as to routes and weather conditions, and to the services of the aerodrome personnel, if available, for assisting in guiding the machine, starting propellers, carrying petrol and oil, etc.

4. Any flight, of which prior notice is given to the Aerodrome Officer, and which is undertaken solely for the purpose of ascertaining the serviceability in the air of the engine or engines, air frame or equipment of the aircraft flown, shall be deemed to be a test flight and shall be exempt from the levy of a landing fee.

5. The extra fee for each landing or departure at night will be levied only when personnel are required to attend, or flares or other lighting apparatus are used.

6. In lieu of the extra fee for each landing or departure at night the person by whom such fee is payable may at his option pay a charge of Rs. 5 per half hour or part thereof for a succession of landings or departures performed by a single user of the aircraft concerned.

7. In respect of an aircraft fitted with wireless telegraph apparatus, in lieu of the extra fee for each landing, and in addition to the standard landing fee, a person by whom such fee is payable may at his option pay a monthly charge at the following rates :—

Class.	Rs.
AA	30
A	30
B	30
C	75
D	75
E	150

8. When an aerodrome is used temporarily for repeated landings, a daily charge equivalent to five times the charge for a single landing for the class of aircraft concerned shall be levied in respect of each aircraft, subject to a maximum total charge, in the first or any subsequent period of 30 consecutive days included in the period during which the aerodrome is so used or in any further period of less than 30 days so included, equivalent to the monthly charge set out in paragraph 1.

9. All charges for landing shall be paid either at the time of, or immediately after, the use of the landing ground.

10. For housing purposes, the area of an aircraft shall be calculated as the product of the span or overall width and the length of the aircraft in the condition in which it is housed :

Provided that, with the approval of the aerodrome authority, it shall not be necessary to fold the supporting surfaces of a flying machine in order to obtain a reduction of the housing fee when there is space available and the period of housing will not exceed 24 hours.

11. Fifty per cent of the standard housing fees shall be charged for mooring aircraft in the open, but this charge shall be made only after an aircraft has been left on the aerodrome for a period of not less than six hours.

12. All charges for housing and mooring other than daily charges shall be paid in advance. When housing space which has been paid for in advance is not used, the space may be used for the housing of other aircraft, and no refund shall be made to the lessee unless he is prevented by the housing of other aircraft from obtaining accommodation for his aircraft.

13. Special rates for long periods may be fixed, on application to the Director of Civil Aviation, in cases in which a number of aircraft are housed or where extensive use is made of facilities over a long period.

SCHEDULE VI.

PENALTIES.

(See rule 139.)

Nature of offence	Relevant Rule or rules	Penalty
1. <i>Registration and marking of aircraft.</i> —Contravention of rules relating to the registration and marking of aircraft.	Rule 5 and the rules in Part IV.	
2. <i>Documents.</i> —Contravention of the rules relating to carriage and production of documents.	7, 17, 19	
3. <i>Radio-telegraphy.</i> —Contravention of the rules relating to the use of radio-telegraph apparatus.	Rule 9 and the rules in Part VII.	
4. <i>Mails.</i> —Contravention of the rule relating to the carriage of mails.	10	Imprisonment for a term not exceeding one month, or a fine not exceeding Rs. 250 or both.
5. <i>Aerial work and public transport.</i> —Unauthorised use of aircraft for aerial work or public transport.	14	
6. <i>Log Books.</i> —Contravention of the rules governing the issue and maintenance of log books.	67	
7. <i>Aircraft accidents.</i> —Failure to notify or submit reports on accidents.	69, 70	
8. <i>Aerodrome.</i> —Contravention of the rules relating to aerodromes.	Rule 11 and the rules in Part XI.	
9. <i>Conditions under which aircraft may be flown.</i> —A. <i>Personnel.</i> —Contravention of the rules relating to personnel.	Rule 6 and the rules in Part V.	
B. <i>Airworthiness.</i> —Contravention of the rules relating to airworthiness.	Rule 15 and the rules in Part VI.	
10. <i>Rules of the air.</i> —Contravention of the rules of the air.	Rule 16 and the rules in Part XII.	
11. <i>Detention of aircraft.</i> —Acts in contravention of any authorised direction given for the detention of an aircraft.	18 (2)	Imprisonment for a term not exceeding 2 months, or a fine not exceeding Rs. 500 or both.
12. <i>General safety conditions.</i> —Contravention of the rules relating to general safety conditions.	The rules in Part III.	
13. <i>Air Route beacons, etc.</i> —Contravention of the rules relating to the supply, supervision and control of air route beacons, aerodrome lights and lights at or in the neighbourhood of aerodromes or air routes.	The rules in Part VIII.	
14. <i>Prohibited carriage.</i> —Unauthorised carriage on aircraft of certain articles.	8	
15. <i>Prohibited areas.</i> —Unauthorised flight over or photography of areas prohibited to aircraft.	12, 18	
16. <i>Entry and departure of aircraft.</i> —Contravention of the conditions under which aircraft may enter or leave British India.	The rules in Part IX of the Indian Aircraft Rules, 1920.	
17. <i>Aircraft accidents.</i> —Removal of or interference with aircraft to which an accident has occurred.	71	
18. <i>Investigation of accidents.</i> —Obstruction of proceedings.	76	Imprisonment for a term not exceeding 3 months, or a fine not exceeding Rs. 1,000 or both.
19. <i>Documents.</i> —Loan of or allowance of use of any license or certificate issued under the rules.	135	
20. <i>Foreign military aircraft.</i> —Unauthorised flight or assistance in such flight.	186	
21. <i>Obstruction of authorised persons</i> in the performance of their duties, under the rules.	187	
22. The doing of any act prohibited by or under any rule not specified in the foregoing items.		

N. MAHADEVA AYYAR,
Additional Deputy Secretary to the Govt. of India.

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SCHEDULE IV.

DIAGRAMS.

Figure 1.—*Navigation Lights*—Angular limits prescribed in rule 89

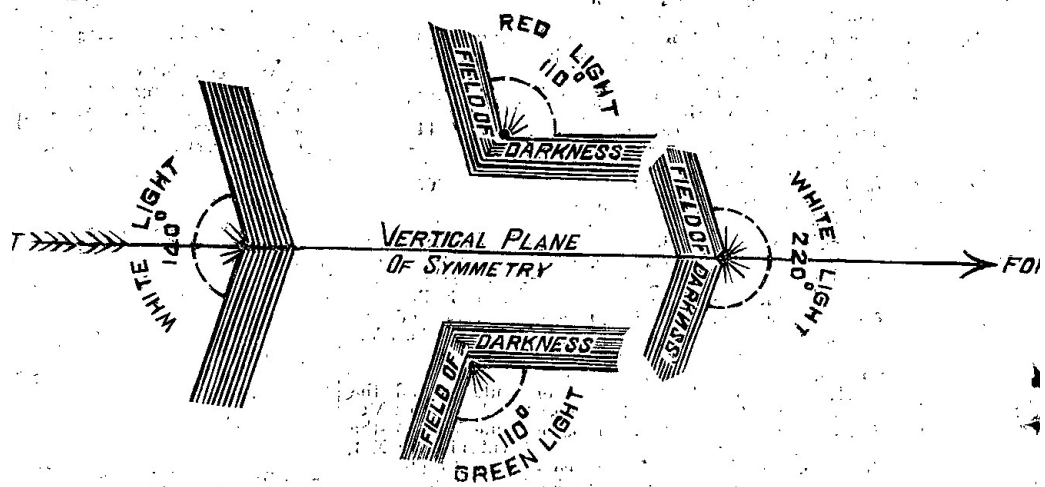


Figure 2.—Star of five points prescribed in sub-rule (2) of rule 105.

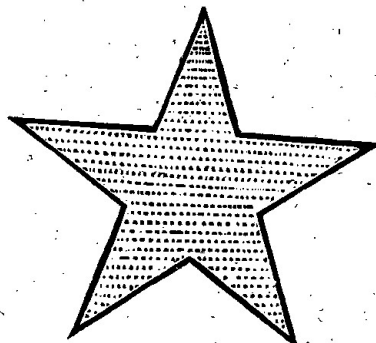


Figure 3.—Red square panel prescribed in sub-rule (3) of rule 105.

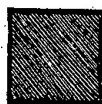


Figure 4.—Red square panel and red rectangular panel prescribed in sub-rule (4) of rule 105.

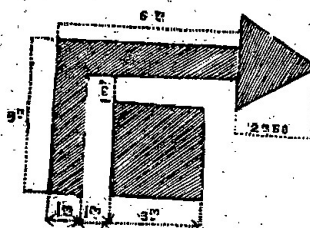


Figure 5.—Red square prescribed in sub-rule (5) of rule 105.



Figure 6.—Red square panel prescribed in sub-rule (6) of rule 105.

Figure 7.—Mast and triangular equilateral pyramid prescribed in sub-rule (7) of rule 105.

